

# VOLUME

---

# VOLUME

# 1

**micromedia**  
a division of IHS Canada

20 Victoria Street  
Toronto, Ontario M5C 2N8  
Tel.: (416) 362-5211  
Toll Free: 1-800-387-2689  
Fax: (416) 362-6161  
Email: [Info@micromedia.on.ca](mailto:Info@micromedia.on.ca)





# **Annual Gaming Report 1998-1999**

**Volume I**

**Alcohol and Gaming Authority**

***Prepared for: The Honourable John Chataway***

***Minister Responsible for the  
Administration of Part II of the  
Gaming Control Act***



Alcohol And Gaming Authority

PO Box 545, 40 Alderney Drive, 5<sup>th</sup> Floor, Dartmouth, NS B2Y 3Y8

December, 1999.

Honourable John Chataway  
Minister Responsible for the Administration of  
Part II of the Gaming Control Act

Dear Minister:

On behalf of the Alcohol and Gaming Authority, I am pleased to submit the Annual Gaming Report for the year ended March 31, 1999, respecting the study of gaming activities in Nova Scotia, as required pursuant to Section 56 of the *Gaming Control Act*.

Yours very truly

A handwritten signature in black ink, appearing to read 'Elwin J. MacNeil'.

Elwin J. MacNeil, Q.C.  
Chair

## ACKNOWLEDGMENTS

This annual report is submitted by the Nova Scotia Alcohol and Gaming Authority (the Authority) to the Minister as required under Section 56 of the *Gaming Control Act*. The members of the Authority are:

Elwin J. MacNeil, Q.C. Chair

G. Wayne Beaton, Q.C., Member

M. Patricia Connelly, Ph.D., Member

Louis A. d'Entremont, Member

William M. MacDonald, Member

The Authority wishes to acknowledge and thank Margaret A.M. Shears, Vice-Chair, for her contributions to the Alcohol and Gaming Authority. Ms. Shears joined the Board at its inception and left in 1998.

The Authority continues to be indebted to the many staff members who have worked on this annual report. Individuals at outside organizations who agreed to be interviewed for the purposes of this report deserve special recognition for their co-operation and assistance. Their names can be found in the appendices.

We also note that external consultants were retained for specific aspects of this work. Their reports are included in the appendices contained in Volumes I and II of this year's Annual Report.

## HIGHLIGHTS

### Chapter 1

- ▶ Nova Scotia has witnessed many changes to the gambling industry during the past year. Most noteworthy: a moratorium on the number of VLTs in the Province; changes to federal laws affecting dice games and gambling on cruise ships; an announced intention by the government to withdraw from the Atlantic Lottery Corporation; and public controversy in relation to the casinos and the Nova Scotia Gaming Corporation.

### Chapter 2

- ▶ Gaming neared the \$1 billion mark in Nova Scotia in 1998/99 with \$988.4 million wagered on video lottery terminals, casinos, lotteries, bingo games and charitable games.
- ▶ Video lottery terminals continue to account for the largest share (43 per cent) of the wager, even after a moratorium was placed on the number of machines. In all, \$419.7 million was wagered on VLTs in 1998/99, nearly \$15 million more than the \$404.7 million wagered in 1997/98.
- ▶ More than \$666.3 million of the \$988.4 million total wager was returned to players in the form of prizes.
- ▶ The Province's share of the revenue came to \$153.4 million, a \$14.1 million increase over 1997/98's provincial revenue of \$139.2 million.
- ▶ Charitable groups received \$25.8 million from wagering in 1998/99.
- ▶ Annual provincial revenues from Nova Scotia's two casinos surpassed by \$1.7 million the \$25 million guaranteed by the operator, partly because the Halifax interim casino's development costs were fully amortized early in the fiscal year.

- ▶ If current financial trends continue, the Province could reimburse the casino operator approximately \$3 million or more in the so-called clawback year (1999/2000) of its income guarantee agreement.
- ▶ Atlantic Lotteries accounted for \$187.8 million in Nova Scotia wagers in 1998/99. The share of that wager distributed to the Province continues to decline: Nova Scotia sells \$22.2 million more in lottery tickets than it did in 1996, but earns \$2.5 million less in Provincial revenue from the Atlantic Lotteries Corporation.
- ▶ A small number of large bingos earn the lion's share of that sector's revenue.
- ▶ Bingo regulations that require non-commercial bingo operators to apportion a minimum of 15 per cent to a charitable or religious purpose resulted in \$14.3 million being made available to minor sports leagues, volunteer fire departments and other charitable or religious organizations.
- ▶ In 1998/99 \$14.1 million was wagered on charitable lotteries such as 50/50 tickets, raffles and the like.

### Chapter 3

- ▶ Rates of participation in gaming activities have remained stable since 1996, according to surveys conducted for the Authority. The same surveys suggest attendance at the Sydney casino may be waning, and that a decline in participation in raffle tickets noted in 1998 was found again in 1999. However, *wagers* across gaming activities have increased.
- ▶ Eleven per cent of surveyed households reported having a child who had participated in some form of gambling, with lotteries (6 per cent) and bingo (5 per cent) cited most frequently. These results may imply that lottery tickets and bingo may have a high level of social acceptance compared with other gaming activities.
- ▶ VLTs continue to garner the highest disapproval (66 per cent) among Nova Scotians of any gaming activity, compared to casinos (43 per cent), bingo (18 per cent), and lotteries (17 per cent).

- ▶ Survey findings suggest that Nova Scotians want mechanisms in place that assist people to control their gambling, including regulations on automated banking machines in gaming establishments, and restricting bill acceptors on video lottery machines.
- ▶ More than half of the respondents were very interested in the amount of money generated by gambling (55 per cent) and how it is used ( 80 per cent), and the impact of gambling on children (56 per cent). Forty-three per cent of the sample was also very interested in the impact of gambling on seniors.
- ▶ Seventy per cent of survey respondents felt that gambling takes advantage of those who can least afford to play, and 55 per cent agreed they would prefer to see VLTs reduced in number or removed from the province, even if it meant increases in their personal taxes. Among the 55 per cent who preferred to have VLTs removed, 49 per cent (27 per cent of the sample) thought if VLTs were banned the players would spend their monies on other gambling activities.
- ▶ The Authority has prepared a *Gambling Addiction Help Directory* containing a provincial listing of all government front-line service providers, clinical agencies, organizations and help groups, and other qualified individuals known to offer information or professional assistance concerning problem gambling.

#### **Chapter 4**

- ▶ MPM Gaming Research, under contract to the Authority, developed a model of social impacts of convenience gambling. The model suggests a larger proportion of problem players for VLTs than other gaming activities. These players contribute to a disproportionately large number of negative social impacts (including family, education, workplace, community, and governance impacts).
- ▶ In a further study commissioned by the Authority, MPM Gaming Research found that gambling expenditures generally do not negatively affect spending on the basic necessities of food and shelter in Nova Scotia. Gambling, however, does negatively affect households' ability to save and plan for their financial futures.

- ▶ Focus group research conducted by the Authority suggested that gambling advertising and promotions may be sending youth misleading messages or crossing the age barrier in targeting youth as potential consumers.
- ▶ The 1997/98 *Nova Scotia Video Lottery Players' Survey*, completed in October 1998 by Focal Research for the Department of Health, indicated that, "it is reasonable to conclude that the vast majority of *Regular Players* derive benefits from the entertainment value of the game without suffering any lasting ill effects." However, the study also notes that less than one per cent (.92 per cent) of adults in Nova Scotia were considered to have a problem with video lottery play.
- ▶ Focus group research conducted by Sterling Research on behalf of the Authority suggested that alterations to VLTs (e.g., modifications to bonus play, lights and sounds, and the stop button), and tracking of player time and expenditures, may be useful measures in combatting problem play behaviours.
- ▶ The number of new gambling profiles completed by Drug Dependency Services remained flat between 1998 and 1997, at about 465 cases; while the number of first-time callers to the Problem Gambling Help Line increased 40 per cent over the same time period. For both services, clients reported most frequently playing VLTs compared to other gambling activities.
- ▶ Focal Research, in a study of VLT expenditures conducted for the Authority, suggested that an increase in other gambling expenditures would be expected in the absence of VLTs, but it is highly unlikely that diverted expenditures would reach the levels noted for video lottery.

## Chapter 5

- ▶ Gaming is becoming ever-more global in nature, thanks to on-line advances and to a continued trend toward large-scale mergers in the casino and lottery industries.
- ▶ Many of the recommendations in the U.S. National Gambling Impact Study Commission Final Report and in Australia's Gambling

Industries Draft Report are already adequately covered by the Nova Scotia *Gaming Control Act* and associated regulations. The Authority notes cross-jurisdictional support in these reports for:

- ▶ creation and implementation of advertising standards;
- ▶ the need for gaming providers to develop policies regarding problem gambling, including measures that allow players to engage in voluntary self-exclusion;
- ▶ the need for further study and regulatory development regarding the use and location of credit card and cash machines and of Internet wagering;
- ▶ the need for better publication of odds and probabilities of winning;
- ▶ the need for independent handling of funding aimed at research and treatment programs at problem gambling and for a central body to be responsible for research into gambling.

## Chapter 6

- ▶ The Alcohol and Gaming Authority respectfully recommends that:
  - ▶ Government require all new video lottery to display actual money spent/played and that all new machines be equipped for use of an Authority-approved tracking device that allows voluntary use of equipment capable of alerting a player of the time and money spent during play;
  - ▶ The Province adopt standards for the control of advertising and marketing of government-operated gaming activities;
  - ▶ Regulations under the *Gaming Control Act* affecting the Voluntary Self Exclusion Program be amended to include: a time limit on the exclusion and the elimination of the appeal process, and that provisions be added to state that all persons engaging in the process waive rights to any prize winnings should they breach their undertaking and place wagers while excluded;
  - ▶ All government departments and agencies be required to provide a full annual accounting for revenues and expenditures related to problem gambling treatment and research;
  - ▶ Research projects be better co-ordinated;
  - ▶ First Nations Bands be encouraged to publish and release audited financial statements annually;
  - ▶ The Province consider the introduction of measures aimed at better regulating Internet gaming within its borders.





# TABLE OF CONTENTS

## ACKNOWLEDGMENTS

## HIGHLIGHTS

## TABLE OF CONTENTS

## LIST OF ITEMS AND APPENDICES

### FOREWARD

### Foreward

Criminal Code Of Canada .....	Page 2
Nova Scotia Gaming Control Act .....	Page 3
The Alcohol and Gaming Authority .....	Page 5
A Word About The Annual Report .....	Page 6
Notes For Forward .....	Page 8

### CHAPTER 1

#### Provincial Gaming Industry

#### Chapter 1

The Year In Review .....	Page 1
Bill C-51 .....	Page 1
Atlantic Lottery Corporation .....	Page 2
Video Lottery Terminal Operations .....	Page 4
Casinos .....	Page 5
Harness Racing .....	Page 7
Review/Update: Last Year's Recommendations .....	Page 8
Notes For Chapter 1 .....	Page 17

### CHAPTER 2

#### Provincial Gaming Activity

#### Chapter 2

Overview .....	Page 1
Defining The Wager .....	Page 1
Provincial Wager By Gaming Activity .....	Page 2
Provincial Wager – Financial Distribution .....	Page 4

<b>Chapter 2 (cont'd)</b>	<b>Chapter 2</b>
Problem Gambling Research Treatment Funding .....	Page 7
Video Lottery Terminals .....	Page 9
The Financial Year In Review .....	Page 9
Other Video Lottery Play .....	Page 11
Prizes And Payout Percentages .....	Page 12
VLTs In Other Canadian Jurisdictions .....	Page 13
VLTs And Responsible Gaming Initiatives .....	Page 15
Casinos .....	Page 17
The Financial Year In Review .....	Page 17
The Long-term Picture .....	Page 20
Development Of The Halifax Permanent Casino .....	Page 22
Casino Regulation .....	Page 24
ALC Lotteries .....	Page 26
The Financial Year In Review .....	Page 26
Repatriation .....	Page 28
The Games People Play .....	Page 32
Regulatory Concerns .....	Page 34
Bingo .....	Page 36
The Financial Year In Review .....	Page 36
Charitable Bingo .....	Page 38
Commercial Bingo .....	Page 42
Charitable Lotteries .....	Page 44
The Financial Year In Review .....	Page 44
Notes For Chapter 2 .....	Page 48

## **CHAPTER 3**

<b>Public Interest and Reaction</b>	<b>Chapter 3</b>
Introduction .....	Page 1
Prevalence And Perceptions Of Gaming .....	Page 2
Participation In Gaming Activities .....	Page 2
Attitudes And Awareness Of Gaming .....	Page 10
Problem Gambling Help Directory .....	Page 23
Problem Gambling Counsellor Criteria .....	Page 24
Stakeholder Interviews .....	Page 26
Socioeconomic Study Of VLTs .....	Page 33
Notes For Chapter 3 .....	Page 36

## **CHAPTER 4**

<b>Assessing Impacts</b>	<b>Chapter 4</b>
Introduction .....	Page 1
Social Impacts .....	Page 4
Convenience Gaming And Social Impacts .....	Page 4
Consumer Income And Expenditure Patterns .....	Page 12
Youth Gambling - Perceptions .....	Page 15
Health Impacts .....	Page 21
Nova Scotia Video Lottery Players' Survey .....	Page 21
VLT Features And Player Tracking .....	Page 28
Treatment Of Problem Gamblers .....	Page 31
Problem Gambling Help Line .....	Page 34
Voluntary Exclusion Program .....	Page 36
Department Of Health Initiatives .....	Page 40
VLT Harm Reduction Study .....	Page 43
Canadian Problem Gambling Index .....	Page 45
Justice Impacts .....	Page 46
Justice Oriented Information System .....	Page 46
Annual Report On Organized Crime .....	Page 46
Gambling And Crime: Media Reports .....	Page 47
RCMP Casino Gaming Section .....	Page 50
RCMP Provincial Illegal Gaming Unit .....	Page 51
Authority Investigation & Enforcement Division .....	Page 51
Economic Impacts .....	Page 53
Socioeconomic Impacts Of VLTs .....	Page 53
VLT Expenditure Analyses .....	Page 59
Environmental Impacts .....	Page 65
Notes For Chapter 4 .....	Page 66

## **CHAPTER 5**

<b>Gaming Activity in Other Jurisdictions</b>	<b>Chapter 5</b>
Introduction .....	Page 1
Gambling On-line .....	Page 2
Stock Market, Day-Trading .....	Page 2
Internet Casinos, Bingos and Competitions .....	Page 3
The Interactive Gaming Council .....	Page 3
Worldwide Regulation of the Internet .....	Page 4

**Chapter 5 (cont'd)****Chapter 5**

Trends and Issues Around the World .....	Page 5
National Gambling Impact Study Commission .....	Page 6
Australia Gambling Industries Draft Report .....	Page 6
Casinos .....	Page 8
Bingos .....	Page 9
Lotteries .....	Page 10
Electronic Gaming Machines .....	Page 12
Office and Betting Pools .....	Page 14
Cross-Canada Gaming Synopsis .....	Page 15
British Columbia .....	Page 15
Alberta .....	Page 25
Saskatchewan .....	Page 28
Manitoba .....	Page 33
Ontario .....	Page 41
Quebec .....	Page 50
New Brunswick .....	Page 53
Nova Scotia .....	Page 57
Newfoundland .....	Page 64
Prince Edward Island .....	Page 67
Yukon .....	Page 69
Northwest Territories .....	Page 71
Notes for Chapter 5 .....	Page 74

**CHAPTER 6****Recommendations**

## LIST OF ITEMS

<b>Item 2.1 (Figure)</b>	
Total Wager By Gaming Activity .....	Chapter 2, Page 2
<b>Item 2.2 (Table)</b>	
Total Wager By Gaming Activity .....	Chapter 2, Page 3
<b>Item 2.3 (Figure)</b>	
Total Wager Distribution .....	Chapter 2, Page 4
<b>Item 2.4 (Table)</b>	
Total Wager Distribution .....	Chapter 2, Page 5
<b>Item 2.5 (Figure)</b>	
VLT Wager Distribution .....	Chapter 2, Page 9
<b>Item 2.6 (Table)</b>	
VLT Wager Distribution .....	Chapter 2, Page 10
<b>Item 2.7 (Table)</b>	
VLT Prize Payout Percentage .....	Chapter 2, Page 13
<b>Item 2.8 (Table)</b>	
Provincial VLT Statistics, March 31, 1998 ....	Chapter 2, Page 14
<b>Item 2.9 (Figure)</b>	
Casino Wager Distribution .....	Chapter 2, Page 17
<b>Item 2.10 (Table)</b>	
Casino Wager Distribution .....	Chapter 2, Page 18
<b>Item 2.11 (Table)</b>	
Provincial Revenue From Casinos .....	Chapter 2, Page 19
<b>Item 2.12 (Figure)</b>	
ALC Lotteries Wager Distribution .....	Chapter 2, Page 26
<b>Item 2.13 (Table)</b>	
ALC Lotteries Wager Distribution .....	Chapter 2, Page 27
<b>Item 2.14 (Table)</b>	
ALC Lotteries Wager Distribution History .....	Chapter 2, Page 28
<b>Item 2.15 (Table)</b>	
Summary Of ALC Economic Benefits	
Study 1994/95 .....	Chapter 2, Page 30

<b>Item 2.16 (Table)</b>	
Summary Of ALC Economic Benefits Study 1994/95	
Excluding Other Jurisdictions .....	Chapter 2, Page 31
<b>Item 2.17 (Figure)</b>	
ALC Lotteries Sales By Game .....	Chapter 2, Page 33
<b>Item 2.18 (Figure)</b>	
Total Bingo Wager Distribution .....	Chapter 2, Page 36
<b>Item 2.19 (Table)</b>	
Bingo Licensees Grouped By Wager .....	Chapter 2, Page 37
<b>Item 2.20 (Figure)</b>	
Charitable Bingo Wager Distribution .....	Chapter 2, Page 39
<b>Item 2.21 (Table)</b>	
Charitable Bingo Wager Distribution .....	Chapter 2, Page 40
<b>Item 2.22 (Table)</b>	
Charitable Bingo Licensees Net Profits .....	Chapter 2, Page 41
<b>Item 2.23 (Figure)</b>	
Commercial Bingo Wager Distribution .....	Chapter 2, Page 42
<b>Item 2.24 (Table)</b>	
Commercial Bingo Wager Distribution .....	Chapter 2, Page 43
<b>Item 2.25 (Figure)</b>	
Charitable Lotteries Wager Distribution .....	Chapter 2, Page 44
<b>Item 2.26 (Table)</b>	
Charitable Lotteries Wager Distribution .....	Chapter 2, Page 45
<b>Item 2.27 (Table)</b>	
Charitable Lotteries Licensees	
Grouped By Wager .....	Chapter 2, Page 46
<b>Item 3.1 (Table)</b>	
Participation And Frequency Of Play .....	Chapter 3, Page 3
<b>Item 3.2 (Figure)</b>	
Participation In Lotteries .....	Chapter 3, Page 4
<b>Item 3.3 (Figure)</b>	
Attendance At Casinos .....	Chapter 3, Page 5
<b>Item 3.4 (Figure)</b>	
Participation In Bingo .....	Chapter 3, Page 7
<b>Item 3.5 (Figure)</b>	
Participation In VLTs .....	Chapter 3, Page 8
<b>Item 3.6 (Figure)</b>	
Opposition To Gambling In Nova Scotia .....	Chapter 3, Page 11

<b>Item 3.7 (Figure)</b>	
Approval/Disapproval Of Individual Gaming Activities .....	Chapter 3, Page 12
<b>Item 3.8 (Figure)</b>	
Approval/Disapproval Of ABMs In Gaming Establishments .....	Chapter 3, Page 14
<b>Item 3.9 (Figure)</b>	
Awareness Of The Casino Voluntary Exclusion Program .....	Chapter 3, Page 16
<b>Item 3.10 (Figure)</b>	
Approval Of Voluntary Exclusion Programs ...	Chapter 3, Page 17
<b>Item 3.11 (Figure)</b>	
Awareness Of Problem Gambling Rate .....	Chapter 3, Page 20
<b>Item 4.1 (Figure)</b>	
A Convenience Model Of Gaming .....	Chapter 4, Page 8
<b>Item 4.2 (Figure)</b>	
Relationship Between Typology Of Players And Social Impacts In Casino .....	Chapter 4, Page 9
<b>Item 4.3 (Table)</b>	
Types Of Gambling Among Problem Gamblers By Gender .....	Chapter 4, Page 32
<b>Item 4.4 (Table)</b>	
Frequency Of Gambling Among Problem Gamblers By Activity .....	Chapter 4, Page 34
<b>Item 4.5 (Table)</b>	
Voluntary Exclusion Requests, March 1999 ....	Chapter 4, Page 38
<b>Item 4.6 (Table)</b>	
Requests To Revoke Voluntary Exclusion Orders, March 1999 .....	Chapter 4, Page 38
<b>Item 4.7 (Table)</b>	
Investigation & Enforcement Inspections .....	Chapter 4, Page 52
<b>Item 4.8 (Table)</b>	
Correlation Between Monthly Expenditures On VLT's And Other Gaming Activities .....	Chapter 4, Page 63





## **LIST OF APPENDICES**

### **APPENDIX A**

A Survey of The Prevalence and Perceptions of Gaming  
in Nova Scotia - Focal Research

### **APPENDIX B**

List of Stakeholder Interview Contacts  
Stakeholder Interview Questionnaire - Nova Scotia  
Alcohol and Gaming Authority

### **APPENDIX C**

Convenience Gaming and Social Impacts  
In Nova Scotia - MPM Gaming Research

### **APPENDIX D**

Convenience Gambling in Nova Scotia:  
A Study of Consumer Income and Expenditure  
Patterns - MPM Gaming Research

### **APPENDIX E**

Youth Gambling: An Exploration of Participation, Perceptions &  
Potential Influences - Nova Scotia Alcohol and Gaming Authority

### **APPENDIX F**

Nova Scotia VL Players' Survey 1997/98 - Focal Research

### **APPENDIX G**

Perceptions of Problematic Machine Characteristics  
and On-Line Tracking among Regular Video  
Lottery Players - Sterling Research

### **APPENDIX H**

Socioeconomic Impact of Video Lottery Terminals -  
Porter Dillon Limited

## **APPENDIX I**

Review of the Porter Dillon Study: Socioeconomic Impact  
of Video Lottery Terminals - MPM Gaming Research

## **APPENDIX J**

Monthly Video Lottery Expenditures Versus Monthly  
Expenditures for Other Gaming Activities - Focal Research

## **APPENDIX K**

National Gambling Impact Study Commission  
Final Report Review - Nova Scotia Alcohol and Gaming  
Authority

## **APPENDIX L**

Australia's Gambling Industries Draft Report Review - Nova  
Scotia Alcohol and Gaming Authority



# FOREWORD

## FOREWORD

Gambling is not new. For centuries humans have wagered on everything from the odds of a tomorrow to the outcome of a sporting event. In Canada, such activities are regulated first and foremost by the *Criminal Code of Canada*. Although the *Code* outlaws gambling in general, it does permit the Provinces to conduct and manage certain types of gaming (see *synopsis below*).

In Nova Scotia, as elsewhere, the business of betting has grown dramatically in the past decade. In the mid-1990s, as the Province prepared to introduce casinos to the area, Government decided it was time to rewrite the provincial rules and regulations affecting games of chance. The *Gaming Control Act*, which became law in February 1995, established for the first time two distinct and separate organizations to handle the responsibility of gambling: one agency to operate, one to regulate.

The Nova Scotia Gaming Corporation (the Gaming Corporation) was created to continue the work of previous government departments by operating the gaming business and its financial dealings. Essentially a business vehicle for the Provincial Government, this Crown corporation is responsible for the conduct and management of Government's gaming activities, including the activities of its approved operators, the Metropolitan Entertainment Group (MEG) and the Atlantic Lottery Corporation (ALC).

Government also realized, however, that an operator should not police itself and that a matter such as gambling should not be left vulnerable to political whims or outside influences. So the *Gaming Control Act* also established a completely separate and distinct body, a regulator to be operated at arm's length from government: the Alcohol and Gaming

Authority (previously known as the Nova Scotia Gaming Control Commission).<sup>1</sup>

Under terms of the *Gaming Control Act*, the Alcohol and Gaming Authority (the Authority) has two mandates:

1. To license and regulate gaming activities in Nova Scotia; and
2. To study and report on certain aspects of gaming and its consequence in Nova Scotia.

The first mandate requires the Authority to ensure that all aspects of gaming are conducted with honesty and integrity and that they comply with the *Criminal Code*, the *Gaming Control Act* and its regulations. Additionally, this mandate requires the Authority to study and report on the health, justice, economic, social and environmental impacts such gaming is having on Nova Scotians.

Like the licensing and regulatory provisions, the research mandate, by necessity, focuses heavily on public protection. It commits the Authority to impartial study of, and reporting on, all gaming activity and to the clear and transparent presentation of its research and findings.

The Authority continues to believe that careful scrutiny and analysis of the impacts of gaming, the extent of the public's participation in it, and the sources and distributions of gambling revenues is required. It attempts to shed light on such issues in its annual statutory reports to the Minister.

## ***CRIMINAL CODE OF CANADA***

Generally speaking, the *Criminal Code of Canada* makes it illegal to gamble or conduct "lottery schemes" in Canada. In laymen's terms, the word "lottery" may suggest a very specific sort of gambling. The *Criminal Code*, however, uses the term in a more universal sense. It, in effect, defines a lottery scheme as any plan or proposal that involves:

1. the disposition of property (a prize);
2. any mode of chance involved in obtaining the prize; and
3. consideration exchanged for a chance to win the prize (i.e. some sort of payment for the chance to win a prize).<sup>2</sup>

Although gambling at large is outlawed, the *Code* includes exceptions to this general rule by authorizing the Provincial Government to conduct and manage lottery schemes alone, or in conjunction with other provinces, pursuant to applicable legislation by the Province. (This has allowed Nova Scotia, for example, to open casinos and to participate with other Atlantic Provinces in the activities of the ALC.) The *Criminal Code* also allows the Lieutenant-Governor-In-Council to appoint provincial authorities, like the Gaming Authority, to license others to conduct and manage lottery schemes. (This gives charitable and religious organizations, fairs and exhibitions, and small scale commercial operators the ability to conduct and manage lottery schemes, provided they hold a provincial gaming licence.)

This year, Royal Assent was given to *Bill C-51*, an omnibus, criminal law amendment bill that included changes to portions of the *Criminal Code of Canada* (see synopsis in this report, Chapter 1). None of the changes, however, affects the Authority powers as outlined above.

## ***THE NOVA SCOTIA GAMING CONTROL ACT***

The *Nova Scotia Gaming Control Act* was created to:

**“2(a) establish a framework for conducting, managing, controlling and regulating casinos and other lottery schemes so as to increase the level of sustainable economic activity within the Province and increase the net revenue of the Province;**

**2(b) ensure that casinos and other lottery schemes are conducted in a socially responsible manner; and**

**2(c) ensure that any measures taken with respect to casinos and other lottery schemes are undertaken for the public good and in the best interests of the public and, without limiting the generality of the foregoing, to minimize the opportunities that give rise to problem gambling and other illnesses, crime and social disruption.”**

Section 42 of the *Gaming Control Act* says the Authority "is to regulate and control casinos and other lottery schemes and to administer this part in the public interest and in accordance with the principles of honesty and integrity." The *Act* also includes the following express directions, requiring the Authority to:

**"56(1)(b) ensure that casinos and other lottery schemes conducted and managed by the Corporation are conducted and managed in accordance with this *Act* and the regulations and the Criminal Code (Canada);**

**56(1)(c) carry on a continuous study of the operation and administration of casinos, other lottery schemes and gaming control laws in effect in other jurisdictions, including the Criminal Code (Canada), that may affect the operation and administration of casinos or other lottery schemes in the Province;**

**56(1)(d) carry on a continuous study of the public interest and reaction of residents of the Province to existing and potential features of casinos, other lottery schemes and games of chance;**

**56(1)(e) carry on a continuous study of the social, health, justice, economic and environmental impact of casinos and other lottery schemes;**

**56(1)(f) make recommendations to the Minister for changes to this Act and the regulations to correct any defect, abuse, illegality or criminal activity in relation to casinos and other lottery schemes; and**

**56(1)(g) submit annually to the Minister a report respecting the matters referred to in clauses (b) to (f)."**

It is with respect to the Authority's legislative responsibility that this report is issued.

## **THE ALCOHOL AND GAMING AUTHORITY**

As legislatively ordered, the Authority regulates all legal gaming activity conducted in the Province, with two exceptions. Harness racing and related parimutuel activities, and the Province's Native Gaming Agreements, fall outside of the Authority's parameters.

To ensure that lottery schemes managed by the Gaming Corporation and its contracted operators, MEG and ALC, are conducted in accordance with the *Criminal Code of Canada* and the *Gaming Control Act*, the Authority's Investigation and Enforcement Division conducts routine inspections. The inspections include interviews with Gaming Corporation staff and reviews of the audit procedures. In addition, the Gaming Corporation regularly submits reports to the Director of the Investigation and Enforcement Division concerning its gaming operations.

Authority compliance officers, based in Sydney and Halifax, are trained in the many areas of casino operations, bingos and VLTs and with respect to other compliance matters under the Authority's jurisdiction. Among other duties, these officers routinely engage in surveillance of the two casinos established by the Gaming Corporation in conjunction with its operator MEG. To further ensure that casino operations comply with the *Gaming Control Act* and its regulations, the Authority uses the help of independent, outside police services. Since the Authority's inception, the Royal Canadian Mounted Police (RCMP) has provided, in conjunction with the Authority's compliance staff, casino surveillance within the casinos in Halifax and Sydney. The RCMP and compliance staff have developed a professional and complementary working relationship that protects the interests of the Province, assets of the casino operator and the safety of the public, as well as the honesty and integrity of the casinos and the games played. The Authority is committed to continuously improving its capacity to ensure compliance at the casinos and has been generally satisfied with the level of compliance over the past year at the casinos.

As of this reporting, ALC was still the Gaming Corporation's agent for ticket and video lotteries in Nova Scotia. Although changes to the relationship were being considered this year<sup>3</sup> (see *Chapter 1*), ALC has remained responsible for the day-to-day operation of VLTs within liquor



licensed premises in the Province and for the break-open, scratch and win, and on-line ticket lotteries sold at designated retail outlets which are under contract to it.

While ALC and MEG undertake the daily operations, the Gaming Corporation is required to oversee and report on the administration, operation and management of casinos or other lottery schemes managed either by it or in its behalf. Section 24(1)(e) of the *Gaming Control Act* requires the Gaming Corporation to report forthwith to the Minister and the Authority any defect, abuse, illegality or criminal activity in relation to casinos and other lottery schemes.

## **A WORD ABOUT THE ANNUAL REPORT**

As in previous years, this report is divided into six chapters. In the Introduction (Chapter 1), the reader is provided with an overview of the past year, information about the Province's gaming industry and about the Authority. This chapter also includes a progress report on the status of recommendations included in the Authority's 1997/98 Annual Report. Chapter 2 provides a financial breakdown of the business of gaming, including an analysis of each type of legal activity in Nova Scotia. In Chapters 3 and 4, the Authority gets to the heart of its research mandate; presenting an analysis of studies assessing the public's interests, attitudes and reactions to gaming activities in the Province and assessments of the social, health, justice, economic and environmental effects of gaming in Nova Scotia, respectively. Chapter 5 contains an overview of gaming trends in other jurisdictions and of issues impacting on the industry. Chapter 6 sets out the recommendations resulting from the Authority's observations this year.

The Annual Report draws heavily from the daily operational activities of the Authority and its staff. The Authority has also been assisted by studies conducted on its behalf by outside entities and has built upon its existing understanding of the gaming industry by remaining abreast of the research and trends in other jurisdictions. When external studies have been commissioned, they have been obtained in accordance with the Government of Nova Scotia's purchasing and tendering guidelines. The

Authority is grateful to, and acknowledges the assistance of, other government departments and agencies in providing the data for this report.

It is important to remember that not every data gathering method or analytical technique used in the accumulated research is capable of generating firm conclusions. Qualitative methods show trends without producing results that allow the ability to generalize with any mathematical precision. As such, they must be deemed exploratory until similar qualitative studies or random quantitative studies uncover similar findings. That being said, results of such studies are helpful in understanding the impacts of gambling and can be vital in helping to focus further avenues of research. Summaries of the studies that have been conducted accompany this report in a second volume as an appendix. To help clarify understanding, however, the Authority has attempted to indicate the sources of its supporting evidence throughout the report, alerting readers to the methods used to make observations or reach conclusions.

## NOTES FOR FORWARD

- 1 Gaming Control Act, Part II.
- 2 Criminal Code of Canada, Section 206.
- 3 Nova Scotia Gaming Corporation, (March 31, 1999). Annual Report 1998/99, p. 7.



# CHAPTER

## PROVINCIAL GAMING INDUSTRY

### *THE YEAR IN REVIEW*

In recent years the gambling industry has seemed to be in the perpetual throes of change. Whether those changes have been precipitated by regulatory or societal pressures or by the simple yet effective powers of supply and demand, the business of betting has been ever-adapting and evolving. The past year was no exception. In Nova Scotia, as elsewhere, this evolution has meant changes to laws, to arrangements and deals with operators and to the manner in which gaming providers and society interact. In an ongoing effort to keep pace with the rapid changes in the industry in general and with the important issues and developments in Nova Scotia in particular, the Nova Scotia Alcohol and Gaming Authority (the Authority) begins this Annual Report with a short review of the main events of concern to Nova Scotians. The Authority's intent is not to present opinions, but rather to simply and objectively make note of the markers set over the past year.

### **BILL C-51**

Changes to the Criminal Code of Canada were introduced by the Federal Government as an omnibus, criminal law amendment bill, Bill C-51, on June 12, 1998. The bill was passed by the House of Commons in November 1998 and given Royal Assent on March 11, 1999. Bill C-51 amended gambling provisions in the Criminal Code affecting dice games and cruise ships.

## **Dice Games**

The first change amended 207(4) of the Code to remove dice games from the list of lottery schemes still prohibited in Canada. As a direct result of this amendment, the operator of the Province's two casinos has begun the process of formally applying to the Authority for permission to add dice games to its existing gaming rosters.

## **International Cruise Ships**

The second gaming-related amendment altered the rules to allow gaming on international cruise ships travelling in Canadian waters. Bill C-51 set out specific conditions that must be met if operators of ships are to be exempted from the general ban on gaming. According to the amendments, ship operators must insure: that all people participating in games are on the ship; that the lottery scheme is not linked "by any means of communication" with any off-board gaming operation or system; and that games are not operated within five nautical miles of any Canadian port at which the ship calls or is schedule to call. According to 207.1(1)(d) the ship must:

**(i) be registered in Canada and its entire voyage be scheduled to be outside Canada, or**

**(ii) be registered anywhere, including Canada, and its voyage include travel within Canada and its voyage must be (a) at least 48 hours duration and include travel in international waters and at least one non-Canadian port of call, and (b) it must not be scheduled to disembark any passengers at a Canadian port who have embarked at another Canadian port, without first calling on at least one other non-Canadian port.**

Given Nova Scotia's popularity as a summer cruise ship destination and the existence in this jurisdiction of several international ferry routes, this regulation may be of future interest from an enforcement perspective.

## **ATLANTIC LOTTERY CORPORATION**

On March 29, 1999 Nova Scotia's Finance Minister announced that the Province would officially withdraw from the Atlantic Lottery Corporation

(ALC) and establish a new provincial lottery operation. ALC had been acting as the agent for the Nova Scotia Gaming Corporation (the Gaming Corporation) with regards to break-open, scratch and win, and on-line ticket lotteries through its designated and contracted retail outlets and has been operating the Gaming Corporation's video lottery terminals within liquor licensed establishments. The announcement was not surprising. The Province had been pressing since 1997 for changes to ALC's profit distribution system which a shareholder's audit, conducted by Nova Scotia Auditor General Roy Salmon, had said needed review. The Gaming Corporation has said a new profit distribution system was required because the existing formula forced the Province to subsidize other stakeholder provinces, essentially forfeiting \$4 million to \$4.5 million each year in profit. The Gaming Corporation has also said the ALC required structural changes in order to allow the Gaming Corporation better and swifter response to regulatory issues raised by the Alcohol and Gaming Authority (the Authority). Despite protracted debate and an agreement in principle on revenue redistribution, the ALC board, which includes representatives from each of the four stakeholder Atlantic Provinces, could not reach the unanimous consent required to alter the system.

The Gaming Corporation has promised that its games and products list will be similar if not identical to the one offered by ALC. The Province's new lottery operations are to be phased into offices in Halifax and Sydney over the upcoming year. VLTs are expected to be brought under Nova Scotia control, or "repatriated" as the Gaming Corporation calls it, by November 1999 and traditional lotteries in March of 2000. Still there remain unresolved issues regarding Nova Scotia's attempts to break away. After a Provincial election in July, the Premier announced that a full review of the plans would be undertaken.

In early 1999, several separate instances of controversy involving ALC promotions and products arose. ALC withdrew its break-open tickets in January after it was discovered that manufacturing deficiencies allowed some players to identify winning tickets. After defects were addressed, the tickets were re-introduced in Newfoundland and subsequently in Nova Scotia. In February controversy centred on ALC's operation of the Pro-Line sports tickets after a single bettor netted \$1.7 million in winnings. The ticket buyer is alleged to have noticed that the sports lottery had based its mid-February week's wager on team lineups prior to a National Basketball

Association strike. Since overall winnings for the draw exceeded ALC's \$2.5-million liability cap, payouts were reduced by five per cent that week and wagering on three other games was suspended. To protect against similar problems in future ALC reviewed and made revisions to its loss prevention cap plan.<sup>1</sup>

Each of these issues is undoubtedly linked to revenue losses for the province in this fiscal year. March also saw the ALC cut short a co-promotion scratch ticket venture involving a billiard club chain. The cross-promotion involved a secondary scratch ticket game called "Rack 'Em Up." The secondary winnings, involving such prizes as free table time at the select chain, were withdrawn at the request of the Authority in response to complaints.

## **VIDEO LOTTERY TERMINAL (VLT) OPERATIONS**

Although video lottery game play has been legal in Nova Scotia since the early 1990s, the Province's operation of these terminals continued to be the focus of debate and controversy in the 1998/99 fiscal year.

On June 27, 1998, the Nova Scotia House of Assembly passed Bill 17, *An Act to Impose a Moratorium on Additional Video Lottery Terminals and to Provide for a Study of VLTs*. As the title suggests, the legislation had two facets, the first being to impose a moratorium on the introduction of any new video lottery terminals in the province. At the time of the legislation's introduction, an independent audit showed that ALC operated 3,234 VLTs (not including machines separately operated under agreements with First Nations) on behalf of the Gaming Corporation. The second part of the legislation called for a study of the Socioeconomic Impact of Video Lottery Terminals to be conducted and presented to the Legislature's Standing Committee on Community Services. That report, undertaken by Porter Dillon Limited in association with Sterling Research Incorporated, was presented to the Committee on April 23, 1999 (discussed further in Chapter 4).

December 8, 1998, marked the release of the 1997/98 Nova Scotia Video Lottery Players' Survey. Conducted by Focal Research on behalf of the Department of Health's Problem Gambling Services division, the report

determined that less than one per cent of adults in Nova Scotia could be categorized as problem VLT gamblers. The Focal Research report was not a prevalence study, rather it was designed to help identify risk factors associated with varying levels of VLT play. Such studies begin by defining the various types of VLT players and therefore helping to assess the potential for success of varying treatment and prevention programs.

On the same day the Focal Research report was released, the Gaming Corporation released its own VLT-related project, a request for proposals aimed at replacing aging video lottery machines. As part of the bidding process, the Gaming Corporation asked VLT manufacturers to include relevant data on how the Province might better adapt its terminals to help preclude problem gambling while insuring its revenue flow. On March 15, 1999, the Gaming Corporation said the responses of three firms (Spielo Gaming International of New Brunswick; Powerhouse Technologies Inc. of Montana; and High Tech Gaming Ltd. of New Brunswick, a distributor of International Gaming Technology of Reno, Nev.) were being assessed by its independent consultants, Dr. Howard Shaffer of Harvard Medical School in Boston, and Dr. Harold Wynne, President of Wynne Resources in Edmonton.

In addition to its request that manufacturers help used technology to mitigate problem gambling, the Gaming Corporation says in its 1999/2000 Business Plan that it has begun development of a retailer education and training program that it hopes to implement in the upcoming year.

## **CASINOS**

For a period of the 1998/99 fiscal year, much attention was focused on the administration and operation, past and future, of the Province's two casinos.

On the first day of the new fiscal year, the Gaming Corporation announced it planned to release sections of the so-called McGhie report, a consultant's report that had been previously kept confidential. The Province's Freedom of Information review officer had earlier recommended that the Gaming Corporation release an edited version of the report in order to satisfy the conflicting needs of public interest and of corporate confidentiality. The



report was McGhie Consulting Limited's evaluation of a 1996 proposal by ITT Sheraton, the majority partner in Metropolitan Entertainment Group (MEG), to build a smaller, hotel-bound casino instead of a stand-alone project on Halifax's waterfront. On May 1, 1998, the Gaming Corporation released the sections of the report recommended by the review officer as well as some additional portions.

On June 17, 1998, the Standing Committee on Public Accounts of the Legislature (PAC) called the former Chairman of the Nova Scotia Gaming Corporation, Ralph Fiske, to testify as to matters that arose during his tenure at the organization and the reasons for his resignation in September of 1997. (Mr. Fiske filed a notice of intended action, launching a civil suit against the Province and the Gaming Corporation in February of 1998, arguing that he was forced to resign. That action is still pending.) As a direct result of Mr. Fiske's testimony in June and at another PAC meeting in July, the committee held a series of sessions in which it interviewed 12 witnesses to probe allegations that the Province and the Gaming Corporation had ineffectually and/or inappropriately managed casino construction contracts involving MEG and its majority business influence, ITT Sheraton. After a total of 14 meetings relating to the subject, the PAC agreed that a subcommittee would draft a summary report of recommendations on procedure and conduct regarding Government leadership and entities like the Gaming Corporation. That document had not been released as of the writing of this report. The NDP caucus, however, did present the Committee with its own review of the proceedings.

Concurrent with the PAC hearings, controversy continued over MEG's ongoing plans for the permanent Halifax casino. In July, the issue reached a head when Caesar's World, the gaming affiliate of ITT Sheraton, ordered a work stoppage at the Halifax casino's waterfront construction site. Officials from the Gaming Corporation said Caesar's World, ITT Sheraton and their parent company, Starwood Hotels and Resorts Worldwide Inc., were reassessing plans at least partly because of delays in regulatory changes on which the plans had been presupposed. Public speculation also centered on the fact that Starwood officials had made it known they were interested in divesting the firm's gambling division. Although work at the Halifax site resumed in October of 1998 (after regulatory changes outlined below were approved), by early 1999 press reports indicated neither the

Gaming Corporation nor casino management believed the September 1999 construction deadline could be met. Indeed, casino officials and the Gaming Corporation have estimated the permanent Halifax casino will not open until some time in the year 2000.<sup>2</sup> The contract between the Province and the casino operator dictates that MEG must pay \$10,000 per day in late fees if the September 15, 1999 targeted opening is delayed.

Regulatory changes recommended by the Gaming Corporation in 1997 affecting casino operations were passed by Government in October 1998. The changes allowed: out-of-province players to obtain credit; 24-hour-7-day operations except for Good Friday, Easter Sunday, Remembrance Day and Christmas Day; the serving of complimentary alcohol in high-limit playing areas; and the operator to apply to the Authority for permission to include new games in its roster.

Late this fiscal year, MEG prepared for another internal restructuring when Park Place Entertainment Corp., a spinoff company of Hilton Hotels Corp., agreed to acquire the gaming division of Starwood Hotels and Resorts. Starwood had become partnered with Purdy's Wharf Development Limited in MEG when it acquired ITT Corp. and ITT Sheraton Canada Ltd.

## **HARNESS RACING**

There are three racetracks in Nova Scotia and five teletheatres that simulcast harness races from tracks inside and outside the Maritimes. In June of 1998, ALC assumed responsibility for marketing and promotion of harness racing in the Maritime Provinces; in Nova Scotia this duty was conducted on behalf of the Gaming Corporation.

On March 1, 1999, Nova Scotia Harness Racing Incorporated (NSHRI) was officially incorporated under the Companies Act. On April 7, 1999, it was designated a Crown corporation responsible for managing and administering the Nova Scotia Harness Racing Fund, a special fund created by the Nova Scotia Harness Racing Incorporated regulations, and for overseeing Nova Scotia's involvement in the harness racing industry. Nova Scotia Harness Racing Incorporated owns one share, and therefore a 33.33 per cent interest, in ALC Harness Racing Corporation, an entity incorporated under the Canada Business Corporation Act on May 7, 1998

to provide marketing and promotional assistance to the harness racing industry in the Maritime Provinces. ALC owns the remaining 66.67 per cent of ALC Harness Racing Corporation on behalf of the Province of New Brunswick and the Province of Prince Edward Island.<sup>3</sup>

As of the year that ends March 31, 2000, the Gaming Corporation will provide management and administrative support to Nova Scotia Harness Racing Incorporated on a cost recovery basis and will contribute to the Harness Racing Fund in amounts authorized and directed by the Minister of Finance.<sup>4</sup>

## **REVIEW AND UPDATE: LAST YEAR'S RECOMMENDATIONS**

One of the responsibilities of the Alcohol and Gaming Authority (Authority) under the study and reporting provisions of the *Gaming Control Act* is to provide recommendations to the Minister, in the Annual Report, concerning any changes which should be made to the *Act* or the regulations to correct any defect, abuse, illegality, or criminal activity in relation to the casino or other lottery schemes. In this section, recommendations included in the 1997/98 Annual Report (in italics at the start of each section) are reviewed, and an update is provided as to the action taken during the past reporting year.

### **1. ATLANTIC LOTTERY CORPORATION**

*The Authority continues to be concerned with the direction and activities of the Atlantic Lottery Corporation (ALC) in a number of areas. ALC, as the agent for the Nova Scotia Gaming Corporation, carries out the majority of gambling in this province. The Authority recommends that all avenues be pursued to ensure that ALC is more sensitive and accountable to Nova Scotian issues and concerns, particularly in the areas of financial management and reporting, profit sharing, sales and marketing, security, and promotions and advertising. To this end, the Authority is in the process of reviewing the regulations relating to ALC's activity in Nova*

*Scotia. Upon completion of this review, the Authority will present to government any recommendations for regulatory change which would improve control over certain of ALC's activities in the Province.*

### **Response**

On March 29, 1999, Nova Scotia's Finance Minister announced that the Province would officially withdraw its ticket and video lottery business from ALC and would establish its own provincial lottery operation. In July of 1999, the Premier announced a full review of that decision. Whether Nova Scotia's lottery business is administered by the Province or by ALC, the review of lottery operations brings with it an opportunity for fundamental changes not only in revenue and profit ratios but in the approach to sales, marketing, security and advertising issues. The Authority continues to work with the Nova Scotia Gaming Corporation and to review regulatory standards with an eye toward recommendations that would make improved accountability possible through better regulation.

## **2. FOCAL RESEARCH PROJECT**

*The Authority supported a special gambling research project commissioned by the Department of Health, which focuses in particular on video lottery terminal (VLT) players. This research project was the subject of a public tender dated April 16, 1997, and was subsequently awarded to Focal Research Consultants Limited. This report was designed to be very comprehensive research which would provide accurate and reliable data concerning video lottery gambling, and problem video lottery gambling. At the time of this writing, the Department of Health has advised the Authority that the results of this research project are not yet complete. Accordingly, the Authority is unable to include the results of the research in this report, and does not have the benefit of the research in formulating recommendations. The Authority believes that this type of research is extremely important and adds to the provincial body of research into gambling. Clearly, an analysis of its findings may well result in the Authority making additional recommendations and/or policy concerning VLTs.*

## **Response**

Focal Research's 1997/98 Nova Scotia Video Lottery Players' Survey was released by the Department of Health on December 8, 1998. In addition to its initial findings, the data provided a wealth of information that may help identify risk factors associated with problem players. As expected, the recommendations and the findings included in the Video Lottery Players' Survey has already lead to supplementary research (see further detail Chapter 4).

The Authority continues to see information in this report that can be of use to researchers, treatment practitioners and others in this field. The release of the survey in December of 1998, after the Authority had completed its 1997/98 Annual Report, reinforces the need for the timely sharing of data by agencies involved in gaming research.

## **3. BINGO INITIATIVES**

*The Authority intends to continue to play a role to assist charitable bingo operations to increase their net profits. Since the implementation of the new Bingo Regulations, which mandated a minimum return to the charity of 15 per cent of gross revenue, profits raised for charity have increased from \$4.7 million in 1995/96 to \$13.5 million in 1997/98. This is even more significant in view of the fact that gross charitable bingo revenues have actually declined slightly over that same period – from \$88 million in 1995/96 to \$86 million in 1997/98.*

*The willingness and hard work of community groups to meet the challenges of a new regulatory regime has created a success story across the Province. The team of Authority staff members, acting as a resource to these groups by providing advice and assistance, was also important to their success.*

*The Authority believes that there are still improvements which can be made, and considers this effort to be very important since every increase in dollars available for charitable purposes can impact communities all over Nova Scotia in a positive way.*

*One tangible way to provide assistance to these groups is for the Authority to create a bingo guidebook. The concept is to organize the financial and operational information currently filed with the Authority by every bingo licensee, and compile this information in a generic format. In effect, the guidebook would serve to disclose to all bingo operators in the Province the standard costs of running bingo, and the methods used by successful operators to control costs and increase the funds raised for charity.*

*Often, organizations run bingo in isolation from other bingo operators, using methods that have not changed for many years. No doubt as a result of the volunteer nature of the organizations, there has historically been limited opportunity for an industry-wide exchange of information, or training and education as to how to effectively manage bingo operations. While bingo is run by charities, in order for these charities to maximize profits, bingo operations need to be recognized for the high volume cash businesses that they are; and, be controlled and managed like well run businesses. The guidebook is a step on this path, and could be used as a communication tool to connect bingo operations with useful provincial information.*

*This information could then be used by community organizations to compare their experience with provincial averages in such areas as prize board strategies, cost of prizes, supplies, wagers, rent and other expenses as a percentage of gross revenue, as well as information about successful formulas for maximum returns.*

### **Response**

Licensing staff at the Authority provide individual licensees with comparative data that can help identify what factors help make for a successful event. They can, for example, use information accrued to determine if a particular venue or type of event may prove more successful in one region than in another. They are in the process of compiling such information and guidelines to complete a guidebook for bingo operators.

## **4. PROCESS IMPROVEMENTS**

*The Authority also intends to continue to streamline the licensing process for bingo, lottery and raffle ticket applications to make the process easier*

*for applicants, and improve customer service by speeding up the turn-around time on standard applications. This effort is in line with other government initiatives to cut "red tape," and also reflects the fact that Authority licensing staff now have considerable experience and training in this area; licensees have been co-operative in adjusting to filing requirements and process changes; and that policies have been developed to assist with these types of applications. The Authority will also be making the licensing process more accessible to organizations in North Eastern Nova Scotia and Cape Breton by providing more licensing services from its Sydney office.*

### **Response**

In the 1998/99 fiscal year, the Authority undertook several initiatives to meet this goal. Using the input and experience of licensing staff, a new in-house computer licensing system has been adapted and is now being phased into operation. By addressing areas of concern for enforcement and ensuring that all filing requirements are properly and promptly met, the program should expedite application processing, easing the way for licensing staff and licensees. The Authority also continued to share its expertise in a regular newsletter to licensees and by developing bingo guidelines that should help underperforming charitable bingo operators to better meet their revenue and distribution objectives.

## **5. GAMING CORPORATION**

*Subsection 30(2) of the Act requires the Gaming Corporation to submit quarterly financial reports to the Minister. Subsection 31(3) requires the Corporation to submit to the Minister an annual report on the accounts of the Corporation, audited by the Auditor General, within 90 days of the end of the Corporation's fiscal year. The Gaming Corporation's practice of providing detailed quarterly and cumulative financial reports is clearly directed towards meeting these statutory obligations.*

*In addition to financial reporting requirements, however, subsection 24(1)(f) of the Act obliges the Corporation to submit annually to the Minister a report respecting the administration, operation and management of casinos and other lottery schemes in the Province. At present, the Corporation's current practice is to comment on*



*administrative, operational and managerial matters in notes to the financial statements. While these notes are fairly extensive, it is questionable, in the Authority's opinion, whether they fully satisfy the purpose and intent of the reporting requirement set forth in subsection 24(1)(f).*

*In the Authority's view, this requirement would be better discharged if the Corporation submitted a separate report to the Minister on the administration, operation and management of casinos and other lottery schemes.*

### **Response**

On July 13, 1999, the Nova Scotia Gaming Corporation released it's year-end documentation for the 1998/99 fiscal year. This year's documentation included not only fourth quarter financial statements with detailed annotations, but a separate report on the administration, operational and management of lottery schemes within the province and a third document relating to harness racing results in the Province.

## **6. GAMING RESEARCH--INITIATIVE TO CO-ORDINATE**

*In the 1996/97 report, the Authority presented the concept of a Gaming Institute. Originally the idea was to establish a gaming research body which would operate independently, focus on problem gambling issues and offer its services to government and regulatory agencies. The Authority is concerned with the lack of co-ordination with respect to gambling research in Nova Scotia which currently exists. A number of departments and agencies of government, including the Authority, are involved in gaming research. While some of these projects are joint ventures, most are not. In order to avoid duplication of effort, and to get maximum value for money, it is advisable, in the Authority's view, for provincial gambling research to be co-ordinated and co-operative. In this way, broad research goals and strategies could be developed and available research funds maximized. All of the parties currently conducting this type of research share a common interest. The research, fundamentally, is geared to learn more about gambling, and the various ways that gambling impacts society. The Authority believes that this common interest and concern could form the basis of a productive and efficient research partnership.*



*The Authority believes it is incumbent on all parties engaged in publicly funded gaming research to recognize that there is only one pool of taxpayers' dollars to pay for gambling research. The Authority continues to believe that the concept of a Gaming Institute as the centre for gaming research by the Province should be pursued. As a goal for the next year, the Authority intends to contact other gambling research participants in the Province to explore the need to co-ordinate and share gambling research information and projects.*

### **Response**

The Authority continues to believe in the value of a central repository for all gambling-related research and expertise. Nova Scotia took a leading edge approach in gambling legislation with the creation of its Gaming Control Act and accompanying regulations. This province remains one of only a few jurisdictions in which research into the social and economic impacts of gaming has not only been mandated for several years but is matched by some measure of required funding. As such, Nova Scotia has had an opportunity to develop expertise and data that have already earned it some notice on the international scene.<sup>5</sup> Full advantage has not always been taken of this research despite ongoing attempts by some of the disparate groups and agencies (including the Authority) to co-ordinate and co-operate on projects.

## **7. RESOURCE HANDBOOK – PROBLEM GAMBLING**

*That the Authority publish and make available a booklet containing a provincial listing of all government front-line service providers, clinical outlets, organizations, help groups, and other qualified individuals who are known to offer information or professional assistance concerning problem gambling.*

*The Authority has noted in its research, particularly the Tri-County Pilot Project, that people in various agencies and organizations do not have ready access to a comprehensive listing of provincial resources and assistance in the problem gambling area. For this reason, it would be helpful to compile a reference booklet which identifies where service providers can either obtain information or assistance about gambling, or direct individuals seeking assistance when they or family members feel a*

*gambling problem may exist. The cost of assembling and the publishing of such a directory could be funded by the Gaming Foundation.*

### **Response**

The Authority acknowledges at the outset that there is no known "cure" for problem gambling, that treatment programs can vary in style, effect and success and that different people may face different degrees of difficulty associated with wagering. Nonetheless it also recognizes that something must be done to help those individuals whose lives are inarguably altered by problem gambling. As a first step, Authority staff have canvassed the Province to identify agencies and resource groups providing front-line assistance to problem gamblers and their families. Available in booklet form, the resource guide provides a directory of available services as well as a listing of some of the gambling behaviours identified by stakeholders as possible cause for concern.

## **8. RESEARCH FUNDING**

*The Gaming Foundation is an organization set up under the auspices of the Gaming Corporation to administer the problem gambling fund. This fund is comprised of equal contributions of a percentage of VLT revenue from the Gaming Corporation and siteholders. At present, the balance of the fund at March 31, 1998 is \$2,031,536. The Foundation's Board of Directors consist of the members of the Gaming Corporation.*

*The Authority questions the potential for the perception of a conflict of interest in the composition of the Foundation's Board. The Authority believes that research into problem gambling is a necessary prelude to the development of effective treatment. It is quite possible that independent research may from time to time reflect adversely on current gambling practices and policies. The Corporation is in an awkward position at best to endorse or reject such research proposals, and the Authority believes it would be preferable to administer the Fund with a Board of Directors operating without a vested interest and with broader representation from the community.*

*Additionally the Authority believes a portion of the fund should be dedicated for gambling research and be transferred, on an annual basis to fund the Authority's studies required under the Act.*

### **Response**

The Authority notes that the Gaming Corporation has listed its plans to transfer responsibility for the Gaming Foundation to another government entity as a priority for the 1999/2000 fiscal year.<sup>6</sup> The Authority maintains that agencies or departments with vested concerns in the revenues garnered from gambling or in the actual provision of treatment programs for problem gamblers may find themselves vulnerable to potential (and unnecessary) conflict when financing of research projects target those areas. It also continues to believe that taxpayers need to know that money apportioned to gaming research and to problem gambling treatment and prevention programs is being used for well-developed, impartial data, information and programs.

## NOTES FOR CHAPTER 1

- 1 Atlantic Lottery Corporation (1998-1999). Annual Report, p. 10.
- 2 Feature Interview: Peter Peachey, General Manager Sheraton Casinos Nova Scotia, Canadian Gaming News, June 1999 edition; and Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 27.
- 3 Nova Scotia Harness Racing Incorporated (March 31, 1999). Financial Statements, p. 4.
- 4 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report 1998/99, p. 29.
- 5 Dickerson, Mark (1998). EGM Players and Responsible Gaming, a paper presented to the National Association for Gambling Studies Conference for Practitioners, Adelaide, Australia.
- 6 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report 1998/99.



## PROVINCIAL GAMING ACTIVITY

### *OVERVIEW*

This chapter presents financial information for each form of legalized gaming under the jurisdiction of the Nova Scotia Alcohol and Gaming Authority (the Authority). These gaming activities include: video lottery terminals (VLTs), casinos, Atlantic Lottery Corporation (ALC) products, bingos, and charitable tickets, lotteries and raffles.

The five gaming activities do not account for all the legal wagering in this Province, simply those under the Authority's jurisdiction. As mentioned in Chapter 1, harness racing falls under the control of Nova Scotia Harness Racing Incorporation (NSHRI), its agent ALC Harness Racing Corporation and the Canadian Pari-mutuel Agency. First Nations gaming is subject to gaming agreements between the individual bands and the Nova Scotia Gaming Corporation (the Gaming Corporation), acting on behalf of the Province. These agreements provide for the creation of independent gaming commissions that have jurisdiction and regulate gaming on Native lands. The Authority recommended in its 1996/97 Annual Gaming Report, and recommends again this year, that these independent gaming commissions publicly report gaming activity within their jurisdictions. The Authority continues to believe this would provide a more complete accounting of provincial gaming activities, particularly with regard to VLTs and bingos.

### DEFINING THE WAGER

In the business of gaming, meaningful debate may be muddled if terms of measurement are not clearly defined. In order to ensure that year-to-year

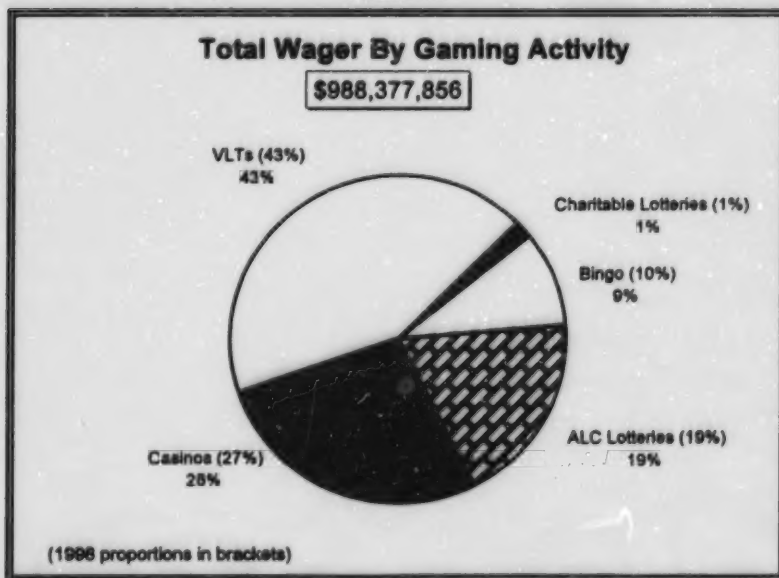
gaming activity comparisons are meaningful, the Authority continues, as it has since 1995/96, to use the "wager" as its base unit of gaming volume measurement. This figure is the amount of money actually wagered on each gaming activity *before* prizes are awarded, operating expenses deducted and so on.

The wager can simply be defined as: the cash deposited when referring to VLTs; the cash deposited into casino slot machines plus the chips purchased for casino table games when referring to casinos;<sup>1</sup> the cost of bingo cards, when referring to bingo; and the cost of tickets when referring to lotteries, raffles and other such ticket games.

## PROVINCIAL WAGER BY GAMING ACTIVITY

In Nova Scotia, \$988.4 million was wagered on VLTs, casinos, lotteries, bingos and charitable games in the fiscal year that ended March 31, 1999.

### Item 2.1



As Item 2.1 shows, VLTs accounted for the largest share of the wager at 43 per cent of the total, the same share of the wager as in 1998. This is of particular interest since legislation implemented early in the fiscal year placed a cap on the number of machines available. Casinos, meanwhile, accounted for 28 per cent of the total provincial wager, up one per cent from last year's total of 27 per cent; ALC lotteries for a 19 per cent share of the total wager, the same as last year and; bingo for 9 per cent of the total wager, down one per cent from 10 per cent of the 1998 fiscal year's total wager. Charitable tickets, lotteries and raffles, meanwhile, accounted for the same one per cent share of the total wager as last year.

### Item 2.2

<b>Total Wager By Gaming Activity</b>			
	<b>1999</b>	<b>1998</b>	<b>Change</b>
VLTs	\$419,711,544	\$404,746,203	3.7%
Casinos	274,222,612	250,935,822	9.3%
ALC Lotteries	187,833,194	182,311,128	3.0%
Bingo	92,543,580	90,642,126	2.1%
Charitable Lotteries	14,066,926	11,649,296	20.8%
<b>TOTALS</b>	<b>\$988,377,856</b>	<b>\$940,284,575</b>	<b>5.1%</b>

Importantly, while shares of the total wager may have shifted and altered somewhat, the amount of money being wagered was up in each activity.

As the detailed VLT section later in this chapter notes, an increase to \$419.7 million in 1998/99 VLT wagers, despite the moratorium, may be attributed in part to an increase in the number of machines before the moratorium but also may reflect an increase in the volume of play. The Province's two casinos, meanwhile, accounted for another \$274.2 million in wagers and lottery games overseen by ALC accounted for \$187.8 million in wagers. Bingos, with wagers of \$92.5 million, saw an increase of nearly \$2.0 million in wagers when compared with 1997/98 wagers, while charitable lotteries, tickets and raffles accounted for the final \$14.1 million of the total wager.

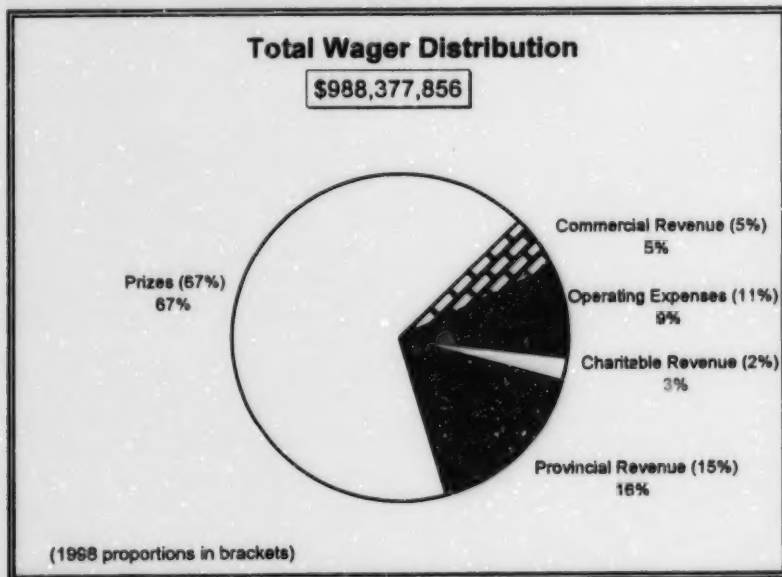


While each of these activities is discussed in further detail later in this Chapter, it is worth noting that \$48.1 million more was wagered in 1998/99 than the \$940.3 million total in 1997/98.

## PROVINCIAL WAGER – FINANCIAL DISTRIBUTION

Of the \$988.4 million wagered in the Province in fiscal 1999, more than \$666.3 million was returned to gaming participants in the form of prizes. That is \$35 million more than the \$626.2 million that went to players' prizes in 1998 but still represents about 67 per cent of the total wager.

### Item 2.3



Once the \$666.3 million in prizes was subtracted from the total wager, \$327.1 million remained to be divided among the Province, retailers and charitable groups for profits and expenses. In all, \$153.4 million went to the Province this year. That marked an increase of 10 per cent or \$14.1

million over last year's revenues of \$139.0 million and meant an increase in the provincial portion of the total wager from 15 to 16 per cent.

The increase may be temporary in nature, however, having been stimulated in part by Metropolitan Entertainment Group (MEG), the operator of the Province's two casinos, having finished amortizing development costs for construction of the Halifax interim casino in the first quarter of the year. This not only increased provincial revenues, but helps account for an unusually large decrease of 8 per cent in the operating expenses portion of the wager to \$95.0 million in fiscal year 1999 from \$103.0 million in fiscal year 1998. Operating expenses at the casino can be expected to again increase when development costs for a new permanent casino on the Halifax waterfront begin to take effect.

#### Item 2.4

##### Total Wager Distribution

	1999	1998	Change
Operating Expenses	\$94,996,550	\$102,964,109	-7.7%
Commercial Revenue	52,839,357	21,870,844	n/a
Charitable Revenue	25,828,269	18,637,684	n/a
VLT Retailer Revenue	*	31,335,691	n/a
Provincial Revenue	153,395,015	139,247,603	10.2%
Prizes	661,318,665	626,228,644	5.6%
<b>TOTALS</b>	<b>\$988,377,856</b>	<b>\$940,284,575</b>	<b>5.1%</b>

\* VLT Retailer Revenue is being restated effective 1999 as Commercial and Charitable Revenues.

Revenue to video lottery retailers, which includes revenues returned to both commercial and charitable operators of licensed establishments with VLTs, increased by nearly 5 per cent to \$32.8 million this year from \$31.3 million last year, but still represented only three per cent of the total gaming wager.

This year, the Alcohol and Gaming Authority's presentation of the annual figures further distributes that revenue, apportioning it among the

charitable and commercial sectors that the retailers represent. This restated representation gives a more accurate overall view of the effects of gaming revenue and should, in future years, allow for more detailed and thorough assessments of the gambling-related revenues being apportioned specifically to commercial businesses and to charitable groups.

The restated revenues shown in Item 2.4 make comparisons of commercial and charitable revenues with 1997/98 figures difficult, however, because they do not include the VLT retailers. It is worth noting, then, that the portion of the wager devoted to charitable revenue, but which does not include VLT retailers, is \$20.9 million. This marks a 12 per cent increase over 1997/98's charitable revenues of \$18.6 million. Commercial revenue for 1998/99 excluding VLT siteholders, meanwhile, is \$24.9 million, a 14 per cent increase over 1997/98 commercial revenues of \$21.9 million.

When the proceeds of VLTs from commercial bar and lounge operators are appropriately apportioned to the revenues earned by other commercial interests involved in casinos, bingos and other lottery forms, as they are in Item 2.4 for 1999, it can be seen that commercial revenues in 1998/99 actually totalled some \$52.9 million and that charitable and religious organizations received \$25.8 million for the furtherance of their works thanks to VLT proceeds, charitable bingos and other lottery games.

This calculation of the charitable revenue also includes proceeds calculated under terms of the agreement between MEG and the Gaming Corporation. That agreement states that the Gaming Corporation is entitled to an amount equal to 100 per cent of the profits from the Sydney casino. The Province has agreed to distribute 50 per cent of this amount to First Nations Bands that have signed its gaming agreements. (This amount is reported, therefore, under Revenue to Province even though it will eventually be redistributed.) The remaining 50 per cent of the Sydney amount was to be made available for distribution to charities, although no distribution had taken place by fiscal year end. In October of 1999, the Province announced in its budget speech that the 50 per cent not apportioned to First Nations Bands has been transferred to general provincial revenues and the charitable apportioning program cancelled.

## **PROBLEM GAMBLING RESEARCH TREATMENT FUNDING**

The casino operators, video lottery terminal retailers and the Nova Scotia Gaming Corporation all help finance programs aimed at curbing problem gambling in Nova Scotia. Each year, as per their operating contract, the casino operators forward \$1 million to the Nova Scotia Department of Health to be used for problem gambling programs. VLT retailers, meanwhile, are contractually obliged to contribute one per cent of their VLT commissions to the Nova Scotia Gaming Foundation which was created in March of 1998 to replace and expand upon the former VLT Problem Gaming Fund. The Gaming Corporation matches the VLT retailers' contributions to the Foundation from its VLT revenues and also oversees the fund's disbursement for research or education in respect of gambling, treatment and remediation of the effects of gambling or similar initiatives.<sup>2</sup>

On March 11, 1998, funding was transferred from the VLT Problem Gaming Fund to the Nova Scotia Gaming Foundation (the Gaming Foundation)<sup>3</sup> This fund included the contributions of both VLT siteholders and the Gaming Corporation since April 1, 1995. In fiscal year 1999, another \$761,328 was contributed and interest income of \$109,879 earned<sup>4</sup>.

As of the end of the year, the Nova Scotia Gaming Foundation had contributions and earnings totalling \$2,621,822.

At March 31, 1999, the Gaming Foundation had approved four grants totalling \$875,223.<sup>5</sup> It had disbursed funds for three initiatives at a total cost of \$244,383:

- ▶ start up costs for an outreach centre for the Compulsive and Problem Gamblers Society in Metro Halifax, \$134,654;
- ▶ VLT harm reduction study at Dalhousie University, \$89,013; and
- ▶ French translation of the Drawing the Line educational supplements presented by the Nova Scotia Department of Health, \$20,716.

It had also approved in principle another \$380,200 grant to the Nova Scotia Department of Education and Culture; \$169,186 to Dalhousie University

for a second phase of the research study on factors affecting video lottery play by social and pathological gamblers; and \$81,454 in further funding for the Compulsive and Problem Gamblers Society outreach centre. As well, the Gaming Foundation had approved a grant of \$304,820 to the Self-Help Connection, which later withdrew its application for funding.<sup>6</sup>

Given the pro-rated \$1-million contributions forwarded by Metropolitan Entertainment Group, the Sydney Casino start-up date of August 1, 1995 and the interim Halifax casino opening date of June 1, 1995, there has been some \$3.83 million forwarded to the Nova Scotia Department of Health for its use in problem gambling initiatives since the casinos' inception. During those years the Department of Health has operated a 1-888 telephone help line, has prepared educational pamphlets, videos and a Web site, and financed a Focal Research Consultants report.

A detailed accounting of the \$1-million-per-year contribution – including breakdowns of monies spent on staff training, program details etc. – would ensure that taxpayers are getting good value from money that is apportioned, according to the casinos' operating contract, for "programs related to problem gambling."

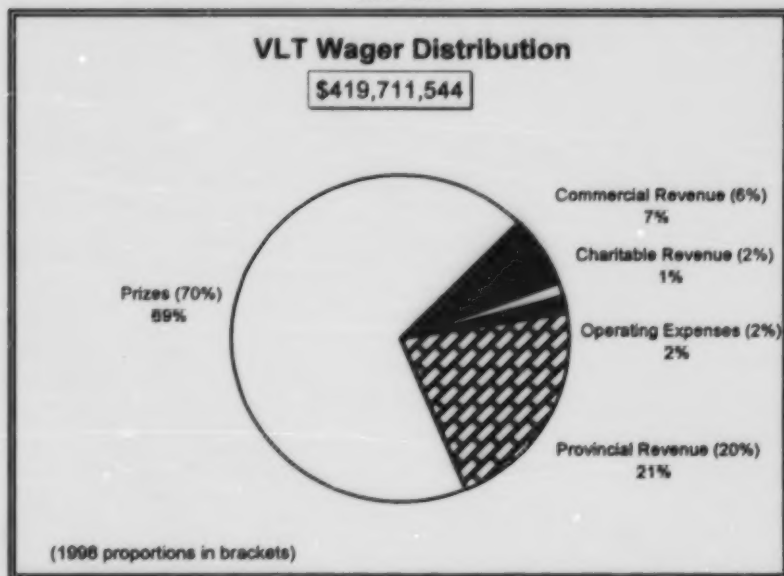
The Alcohol and Gaming Authority continues to believe that the best possible use should be made of the money devoted to problem gambling research, education, treatment and prevention and that clear accounting can help guard against potential duplications of programming and might also better quantify for all involved the measure of problem gambling as well as targeting the costs of possible treatments.

## VIDEO LOTTERY TERMINALS

### THE FINANCIAL YEAR IN REVIEW

As explained in the Foreword of this report, Nova Scotia's Video Lottery Terminal (VLT) program is operated by the Atlantic Lottery Corporation (ALC) acting as an agent of the Nova Scotia Gaming Corporation (Gaming Corporation), the Province's gambling operator. This year, video lottery play in the Province was impacted by *Bill 17, An Act to Impose a Moratorium on Additional Video Lottery Terminals and to Provide for a Study of VLTs (The Moratorium Act)*. Introduced in June of 1998, the moratorium froze the number of ALC operated VLTs at 3,234 (not including machines separately operated under agreements with First Nations groups) effective 11:59 p.m. on June 30, 1998.

#### Item 2.5



Although the maximum number of machines did not change, and at some times throughout the year there were fewer than the allowable number in active circulation, more money continued to be wagered on video lottery play than on any other form of legal gambling in the Province. A total of \$419.7 million was wagered in provincial VLTs, an increase of nearly 4 per cent over 1997/98 wagers of \$404.7 million that may be attributed to not only increase in volume of play but an increase in the number of machines before the moratorium was put in place.<sup>7</sup>

#### Item 2.6

##### VLT Wager Distribution

	1999	1998	Change
Operating Expenses	\$8,591,388	\$9,308,798	-7.7%
Commercial Revenue	27,920,610	*	n/a
Charitable Revenue	4,914,979	*	n/a
VLT Retailer Revenue	*	31,335,691	4.8%
Provincial Revenue	87,675,797	80,351,012	9.1%
Prizes	290,608,770	283,750,702	2.4%
<b>TOTALS</b>	<b>\$419,711,544</b>	<b>\$404,746,203</b>	<b>3.7%</b>

\* VLT Retailer Revenue is being restated effective 1999 as Commercial and Charitable Revenues. VLT Retailer Revenue change is determined by comparing 1999 Commercial and Charitable revenues with 1998 VLT Retailer total.

Of that \$419.7 million, \$290.6 million was distributed in prizes, an increase of 2 per cent over last year's total of \$283.7 million. Indeed, prizes account for 69 per cent of the wager's distribution. That is still the largest portion of the total wager, although it does mark a decrease of 1 per cent from 1998's prizes' share, which was 70 per cent of the VLT wager. The 1 per cent difference can be found in revenues to the Province which increased to 21 per cent of the wager with a hike of \$7.3 million in 1998/99 to \$87.7 million from \$80.4 million in 1997/98.

The portion of the wager devoted to operating expenses was constant at 2 per cent of the total wager, even though year-over-year operating costs were down 8 per cent to \$8.6 million in 1998/99 from \$9.3 million in



1997/98. The decline in actual costs may be partly attributed to plans for software upgrades that were cancelled after the Gaming Corporation issued a Request for Proposals for new machines in December 1998.<sup>8</sup> The year-over-year decrease is also of interest, however, when considered in relation to overall ALC operating costs. As noted in fuller detail in the section of this chapter dealing with ALC's traditional lotteries, overall ALC operating costs are calculated using a formula that has been the subject of controversy in Nova Scotia. Based on traditional ticket and VLT sales, that formula has resulted in steady increases in Nova Scotia's share of ALC operating costs. It is worth noting, then, that operating costs for Nova Scotia-based VLTs have actually decreased by \$8.6 million while ALC's traditional lotteries' operating costs have increased marginally.

The overall revenue from VLTs paid to the 575 charities and businesses that act as retailers, meanwhile, increased nearly 5 per cent to a total of \$32.8 million in 1998/99 from \$31.3 million in 1997/98. Beginning this year, those revenues are being restated as commercial and charitable revenues to better reflect their real distribution and to bring the VLT wager distribution in line with that of other gaming activities included in this Annual Report. The new distribution also makes possible more detailed analysis of any revenue changes that may reflect shifts in the distribution. As Item 2.6 indicates, commercial siteholders received \$27.9 million in revenues in 1998/99 and charitable organizations with VLTs received \$4.9 million.

In 1998/99, new retailer agreements dictated each video lottery terminal must meet a minimum net income of \$275 per week. Some charitable siteholders worried they would lose machines critical to their charitable causes because other, non-charitable sites could produce higher revenues.<sup>9</sup> The agreement in December of 1998, also reduced the retailers' commission rate to 25 per cent from 30 per cent. The reduction only became effective March 1, 1999.<sup>10</sup>

## **OTHER VIDEO LOTTERY PLAY**

The \$419.7 million wager does not represent the entire stake of the video lottery market in Nova Scotia. In 1998/99, the Province also received net revenues of \$67,234 as its share from video lottery terminals aboard



interprovincial ferries. The Gaming Corporation has also entered into contractual agreements with 10 First Nations regarding gaming. As per the terms of those agreements, a recent consultant's report notes there were 397 video lottery terminals in operation at First Nations' sites on February 29, 1999, with the potential for these bands to legally add 409 more.<sup>11</sup> These VLT machines are administered and regulated, as per the gaming agreements, by a National Gaming Commission on each Reserve, are not subject to the provisions of the *Moratorium Act* and do not come under the regulatory aegis of the Authority.

Although these machines do not fall under the responsibility of the Authority, they certainly provide residents of and visitors to this Province with further access to wagering. Although legal agreements between the Province and the Native Gaming Commissions administering these machines contemplate the need for each Native Gaming Commission to provide to the Province annual independent audits and records, including financial reports, of licensed operators, no public accounting is available. If one assumes, however, that the Provincial VLT wager of \$419.7 million was evenly distributed among each of its 3,234 machines, the average wager per machine would be about \$129,781. If each of the First Nations' 397 reportedly active machines earned that average and those wagers were added on to the Provincial totals, the VLT wager would actually increase by \$51.5 million to \$471.2 million. Even if each machine earned only \$100,000, the amount wagered on VLTs in this Province would be increased by a substantial \$39.7 million or 10 per cent.

## **PRIZES AND PAYOUT PERCENTAGES**

Sometimes talk of VLTs is confused by people comparing apples and oranges. It is important to remember, for example, that the prizes actually paid out are only a part of the process; credits are also winnings which some players choose to re-wager with continued play.

If, for example, a person puts \$10 in a machine and plays for several hours, the actual wager is much more than \$10. This is because the player has bet the original \$10 plus all the credits he or she has won along the way.

### Item 2.7

VLT Prize Payout Percentage			
	1999	1998	Change
Credits Played	2,468	2,418	2.1%
Credits Won	2,339	2,298	1.8%
<b>Prize Payout Percentage</b>	<b>94.77%</b>	<b>95.04%</b>	

The concept of what the industry calls payout percentage is also often misunderstood. Simply put, the payout percentage is a measure that can be arrived at by dividing the prizes by the number of plays over an extended period of time. In Nova Scotia, regulations made pursuant to the Gaming Control Act stipulate that this payout must not go below 80 per cent. In 1998/99, as Item 2.7 shows, a total of 2,339 million credits were won in Nova Scotia VLTs and 2,468 million credits were played. The average prize payout, therefore, is 95 per cent, 15 per cent above the legislated minimum.

That does not mean each machine is required to pay 95 cents on the dollar each time it is played. The payout percentage is the payout on each machine over a prolonged period of use and is carefully monitored by the Authority.

### VLTS IN OTHER CANADIAN JURISDICTIONS

Currently, Manitoba and Saskatchewan are the only two other jurisdictions in Canada publicly reporting their VLT activity in a manner similar to that in Nova Scotia; other provinces report only net VLT figures or offer otherwise differing data. At the time of this writing, the three provinces' annual reports were not available for the 1998/99 fiscal year, however, data for 1997/98 indicates that Nova Scotians had an average payout of 95 per cent while Saskatchewan and Manitoba averaged at 93 per cent. According to those statistics, too, Nova Scotians deposited \$404 million in VLTs while residents of Saskatchewan deposited \$609 million and Manitobans deposited \$692 million in 1998.

### Item 2.8

#### Provincial VLT Statistics, March 31, 1998

Province	Population*	VLTs	VLTs/1000 Adults	Rank
New Brunswick	581,596	3,719	6.39	1
Newfoundland	418,515	2,373	5.67	2
Manitoba**	846,093	4,418	5.22	3
Saskatchewan	748,879	3,578	4.78	4
Nova Scotia**	719,162	3,130	4.35	5
Prince Edward Island	101,910	339	3.33	6
Alberta***	2,151,176	5,852	2.72	7
Quebec	5,685,447	15,256	2.68	8
Ontario	8,675,210	0	0	9
British Columbia	3,092,539	0	0	10
Yukon	23,109	0	0	11
Northwest Territories	42,743	0	0	12

Statistics Canada, Intercensal Population Estimates, July 1, 1998, population 18 and over.

\*\* VLTs on First Nations Lands not included.

\*\*\* There is a government cap of 6,000 terminals but it has not yet been reached.

Sources: Respective 1998 Annual Reports.

As Item 2.8 shows, Manitoba and Saskatchewan also rank higher than Nova Scotia in the number of VLTs per thousand adults of population. With 4.35 VLTs per thousand adults, Nova Scotia sits at fifth place, also below Newfoundland and New Brunswick. First place New Brunswick, with 6.39 VLTs per 1,000 adults, may see changes in the next fiscal year after recently pulling the gaming devices from its corner stores. (Nova Scotia has restricted its VLTs to liquor-licensed, and therefore age restricted, establishments since 1993.) Upcoming changes in VLT play may also be anticipated in coming years in Alberta, which placed seventh in 1999 on a nationwide scale of VLTs per thousand adults, after a court ruled this year that Alberta Gaming and Liquor Commission had exceeded its jurisdiction in trying to remove VLTs from communities that had voted in

plebiscites for such action.<sup>12</sup> (A fuller discussion of this decision can be found in the Video Lottery Terminal section of Chapter 5 of this report in *Worldwide Trends*.)

## **VLTS AND RESPONSIBLE GAMING INITIATIVES**

In 1999, the Gaming Corporation began implementing a plan it had developed to try to encourage responsible play and mitigate harmful video lottery gambling. The four components of the program include: upgrading of the actual machines' hardware and software; development of a retailer training and education program; implementation of a new VLT retailer agreement, and; development of a voluntary exclusion program for players.<sup>13</sup>

The portions of this plan aimed at voluntary exclusion and retailer training are not unique. As part of its plan aimed at responsible gaming, Manitoba recently passed legislation which requires each owner/operator of a VLT supplied liquor-licensed establishment to have at least one person on staff at all times who is fully trained in a government-approved harm minimization, responsible play VLT program. That program trains staff to recognize and deal with behaviours that might signal problem play and teaches them how to guide players who wish help. Operators who do not meet the obligation of having employees trained in the VLT program risk sanctions, including loss of VLT revenues and one-year suspension cancellation of siteholder agreements that allow operation of the machines.

As part of its long-term responsible play plan, the Gaming Corporation issued a request for proposals in December of 1998 for new video lottery machines. In that request for proposals, the Gaming Corporation asked VLT manufacturers and suppliers to include relevant data on how the Province might better adapt its terminals to help preclude problem gambling while insuring its revenue flow. Independent consultants, Dr. Howard Shaffer of Harvard Medical School in Boston and Dr. Harold Wynne, President of Wynne Resources in Edmonton, were retained to help guide the Gaming Corporation's initiative. By March 15, 1999, the Gaming Corporation had narrowed its search to the responses of three firms: Spielo Gaming International of New Brunswick; Powerhouse

Technologies Incorporated of Montana; and High Tech Gaming Limited of New Brunswick, a distributor of International Gaming Technology of Reno, Nevada. The Gaming Corporation also began development of a retailer education and training program that it will implement in the upcoming year.<sup>14</sup>

As the Australian Productivity Commission noted in its draft report on Australia's Gambling Industries: *"There are a wide range of possible changes to the design of poker machines which should be investigated to reduce their hazards for problem gambling, without affecting recreational gamblers."*<sup>15</sup> That being said, the Productivity Commission also cites the need for probity regulations across all gambling types and venues.<sup>16</sup> Indeed, software and hardware advances that can make it easier, for example, to discourage problem play also require high levels of technological scrutiny. Only when regulations and testing is adequately put in place to ensure the integrity and continuum of all technical, hardware, software and behavioural facets of video lottery play can responsible play become a reality.

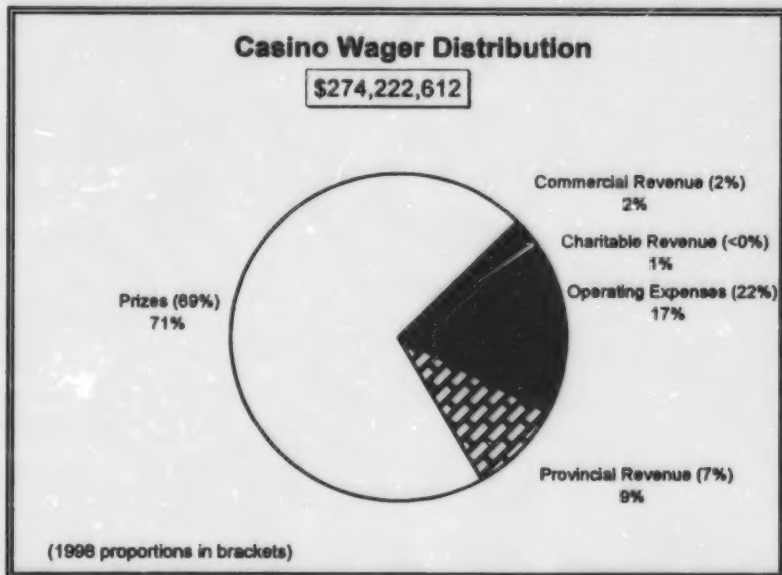
# CASINOS

## THE FINANCIAL YEAR IN REVIEW

The convention within the casino industry is that revenues are often reported as the net win from gaming activities. This net win is the difference between the amounts wagered and the amounts paid out as winnings.

For consistency sake when comparing casino data with other gambling activities, however, the Alcohol and Gaming Authority (Authority) has chosen to report the total amount wagered, not just the net win. For clarification, when measuring the "amounts wagered" and the "amounts paid as prizes," the Authority has not included slot machine game credits won and played. In addition, it should be noted that when comparing the casino operations with other forms of gaming, only the Province's actual revenue from casino gaming activity is used, not the sums needed to ensure the \$25.0 million income guaranteed by the operator for its first four years of operation in Halifax.

### Item 2.9



With that information in hand, it can be reported that Nova Scotians wagered \$274.2 million in the Province's two casinos in 1999. That marks an increase of \$23.3 million, or 9 per cent, over the total amount wagered in 1998. The Province's share of that amount increased by \$6.6 million, up 35 per cent over last year's share of the casino wager.

#### Item 2.10

##### Casino Wager Distribution

	1999	1998	Change
Operating Expenses	\$45,774,150	\$54,077,025	-15.4%
Commercial Revenue	6,609,575	3,390,935	94.9%
Charitable Revenue	1,141,640	615,046	85.6%
Provincial Revenue	25,420,887	18,783,441	35.3%
Prizes	195,276,360	174,069,375	12.2%
<b>TOTALS</b>	<b>\$274,222,612</b>	<b>\$250,935,822</b>	<b>9.3%</b>

Under terms of an operating contract between the Nova Scotia Gaming Corporation (Gaming Corporation), and its operator, Metropolitan Entertainment Group (MEG), the Gaming Corporation is entitled to an amount equal to 100 per cent of the cash available for distribution from the Sydney casino. The Province of Nova Scotia had, in turn, agreed to distribute 50 per cent of this profit to First Nation Bands that have signed gaming agreements with the Province and to make the remaining 50 per cent available to qualified Nova Scotia charities. (In Item 2.10, revenue to be assigned to the First Nation Bands is therefore included in provincial revenue even though it will eventually be forwarded on.)

For the year ending March 31, 1999, the amount available for distribution to the charities, then, was \$1.1 million. This amount is up 95 per cent from the 1998 revenue that was available to charities, \$615,046, but still amounts to less than 1 per cent of the total casino wager. In October 1999, the Province announced that this money would be redirected to general revenues.



### Item 2.11

Provincial Revenue From Casinos						
	1999			1998		
	Halifax	Sydney	Total	Halifax	Sydney	Total
Net Operating Income	\$9.1	2.3	\$11.4	\$3.4	1.2	\$4.6
Win Tax	10.0	5.1	15.1	9.6	5.2	14.8
AGA Registration Fee	0.1	0.1	0.2	0.1	0.1	0.2
	\$19.2	7.5	26.7	\$13.1	6.5	19.6
Income Guarantee			25.0			25.0
<b>Operator Shortfall (Clawback) Amount</b>			<b>(\$1.7)</b>			<b>\$5.4</b>

Also under terms of its agreement with the Gaming Corporation, the operator agreed that the Province's share of the casino revenues would not dip below \$25.0 million for the first four years of business, beginning in July 1995. Last year, for example, MEG added \$5.5 million to help bring the Province's share of the earnings to its required amount. This year, the Province's share of the earnings from casino operations increased by 35 per cent over last year. In fact, the Province's share surpassed the \$25.0 million minimum by nearly \$1.7 million, an amount that applies against the operator's previous guarantee payments.

Much of the change in the net operating income shown in Item 2.11 can be attributed to a 15 per cent decrease in operating expenses that is clearly shown in Items 2.9 and 2.10. This dip to \$45.7 million in 1999 from over \$54.0 million in 1998, is largely due to the fact that development costs of \$24.1 million for construction of the Halifax interim casino were fully amortized in the first quarter of this year.

Prizes, meanwhile, increased by 12 per cent to account for 71 per cent of the total casino wager, up from 69 per cent in 1998, while the share that went to the operator by way of fees increased by 95 per cent to account for about 2 per cent of the total casino wager. This increase in fees can also be attributed to construction costs of the interim casino being fully amortized. Under terms of the operating agreement with MEG, appropriate operator



fees include: an amount equal to 3 per cent of casino revenue in Sydney as a base fee; 10 per cent of casino revenue less casino win taxes, the base fee and defined operating expenses as an incentive fee in Sydney, and; an amount equal to 35 per cent of cash available for distribution from the interim Halifax casino.<sup>17</sup>

The Gaming Corporation has reported that the number of daily admissions at the interim Halifax casino actually fell but that an increase in volume still accounted for an increase in profits.<sup>18</sup> Still, the Gaming Corporation believes that regulatory changes passed in the fall of 1998 will appeal to new markets once the permanent casino is opened on the Halifax waterfront. The past fiscal year was the first full year of operation for a new high-limit room in the interim casino. Called the Crown Club, the private area accounted for 28 per cent of the total table game revenues and 15 per cent of the total slot machine revenues for the period ending December 31, 1998.<sup>19</sup>

The Sydney casino has also opened a high-limit room called the Crown Club effective March of 1999. In comparison to the 1998 fiscal year, however, revenues in total at the Cape Breton casino were slightly down. The Gaming Corporation has reported that slot revenues were 2 per cent higher and volume was significantly ahead of 1998, despite a reduction in daily admissions. Table games' revenues were significantly below last year's levels, but operations overall were slightly profitable for the first time, something the Gaming Corporation attributes in large part to the elimination of a day shift in June.<sup>20</sup>

## **THE LONG-TERM PICTURE**

On May 31, 1995, the Gaming Corporation entered into an operating contract with Metropolitan Entertainment Group (MEG), a partnership between ITT Sheraton Canada Ltd. and Purdy's Wharf Development. The contract gave MEG, acting as an agent on behalf of the Gaming Corporation, the exclusive right to operate casinos in Halifax and Sydney for a period that ends on December 31, 2015.

In 1998, Starwood Hotels & Resorts Worldwide Inc., acquired ITT Sheraton Corporation and ITT Sheraton Canada Ltd., thereby becoming the

majority business influence in MEG. Late this year, Starwood agreed to sell its casino holdings to Park Place Entertainment Corp. The purchase was expected to be finalized by November 1999. Regardless of these changes in majority partners, MEG remains contractually obliged, as per its operating contract with the Gaming Corporation, to develop, finance and construct first a temporary then permanent casino facility in Halifax, as well as a permanent casino in Sydney.

In Sydney, MEG built a permanent casino that opened on August 1, 1995. As of March 31, 1999, the Sydney Casino featured 14 table games and 353 slot machines.<sup>21</sup> In Halifax, meanwhile, a temporary facility was opened in the Sheraton Halifax Hotel on June 1, 1995. As of March 31, 1999, it held 30 table games (down from the previous year's 37) and 565 slot machines.

Among other things, as mentioned above, MEG's operating contract provides that provincial revenues from the casinos will not dip below \$25.0 million in each of the agreement's first four years of operation. While MEG is responsible for topping up revenues in any years in which they do not hit \$25.0 million, the contract also says that if the defined provincial revenues exceed \$25.0 million in any year, the operator may retain the excess amount, up to a maximum of the total income guarantee supplements it has already paid.<sup>22</sup>

The income guarantee commenced on June 1, 1995, with the opening of the Halifax interim casino. The fourth and final year of the guarantee ended July 31, 1999. However, the operating contract includes a shadow fifth year. Also called the clawback year, it began on August 1, 1999, and will end July 31, 2000. In that clawback year, MEG is still entitled to recover any amount exceeding the \$25.0 million provincial revenue limit "up to a maximum of the aggregate amount" it paid out to the Gaming Corporation during the four-year guarantee period.<sup>23</sup>

As of July 31, 1998, the Gaming Corporation had calculated that it had earned about \$20.9 million in income guarantee payments for the first three years of the four-year deal.<sup>24</sup> In the fourth year, 1999, the Province's revenues exceeded the \$25.0 million mark by about \$1.7 million, an amount the operator retains.

## **DEVELOPMENT OF THE HALIFAX PERMANENT CASINO**

As per its contract, MEG continued work this fiscal year on a permanent Halifax waterfront casino. With about 130,000 square feet of space (33,000 of which will be dedicated to gaming space), the facility is to include an amphitheatre, a licensed restaurant, a food court, and an entertainment lounge as well as 790 slot machines, and 40 games tables and is expected to cost about \$97.0 million, plus or minus 12 per cent.<sup>25</sup>

In July, however, construction came to a full halt at the order of executives in Caesar's World -- the gaming division of MEG's primary partner, Starwood Resorts. The Gaming Corporation, which had not authorized the work stoppage, was told the operator needed to reassess the casino's pre-approved design which had been at least partly premised on regulatory changes that had not been passed by Government.<sup>26</sup> The regulatory changes at issue had been agreed to by the Gaming Corporation and MEG in 1997. Designed to attract high rollers from out of province and to level the playing field with other casinos in Ontario, Quebec and New England, the changes recommended to Government by the Gaming Corporation allowed: the serving of complimentary alcoholic drinks in the high limit room; 24-hour, seven-day operation except for Good Friday, Easter Sunday, Remembrance Day and Christmas Day; liquor service during all hours the casino is lawfully open, and; credit for out-of-province players.<sup>27</sup>

The proposed changes were ratified by Government in October 1998. Construction at the permanent casino site resumed that same month, but the unscheduled construction delay may have contributed to a postponement of the permanent casino's scheduled September 1999 completion date. The Gaming Corporation has now said it does not expect the structure to be opened until April of 2000.<sup>28</sup> According to the construction contract between MEG and the Gaming Corporation, MEG is required to pay a \$10,000 fee for each day after September 15, 1999 that the casino is not completed.<sup>29</sup>

### **The Financial Implications**

Under terms of the agreements between MEG and the Gaming Corporation, the cost of developing the Sydney and Halifax casinos is amortized over specific periods of time. In May of 1998, the approved development costs

of \$24.1 million for construction of the Halifax interim casino had been fully amortized.<sup>30</sup> This helped result in the substantial increase in the Halifax net operating income illustrated in Items 2.9, 2.10 and 2.11.

Payments to the operator can be expected to resume, and net operating income to register a commensurate decrease, when approved development costs for the permanent casino begin to be charged. Delays in construction, however, mean that the new charges are not expected to appear until the 2000/2001 fiscal year, after the scheduled April 2000 opening of the permanent casino. In the interim, there will be an anomaly period when there will be no amortization charges for either the interim or the permanent casinos in Halifax.

This extended hiatus from amortization payments (which might be considered akin to a one-year suspension of mortgage payments for the average homeowner) should lead to improved casino revenues for 1999/2000 even if basic income remains the same. If, for example, profitability and activity levels at the casinos in 1999/2000 remained exactly the same as in 1998/99, the Province's revenues would still increase because the \$1.4 million in final amortization costs deducted in 1998/99 for the interim casino<sup>31</sup> would not be necessary and could be added instead to the revenue stream.

The period of amortization free activity is also of note with relation to the shadow or clawback year included in the income guarantee provisions. As mentioned earlier in this section, the agreement between MEG and the Gaming Corporation allows for a clawback year, beginning August 1, 1999. During this clawback year, MEG may retain any casino revenues that exceed \$25.0 million, up to the total it had previously paid in income guarantee supplements. Since the contracts between MEG and the Gaming Corporation were not amended to account for the construction delay, this extended period of amortization-free operation is likely to coincide with much of that clawback year.

If one continues to assume that profitability and activity levels remained exactly the same in the casinos in 1999/2000 as in 1998/99, the operator might be able to claw back \$3.1 million in 1999/2000: the same \$1.7 million it was due in 1998/99 plus the additional \$1.4 million it had deducted for final interim casino amortization costs. In that case, the

clawback might be enough to compensate for about 300 days (or until July 2000) of \$10,000 per day fees due for the construction delay.

In the final analysis, it is not possible to determine the exact financial implications of the combined circumstances involving the coinciding clawback year, the postponed opening of the permanent casino and the amortization-free anomaly period. It is certainly possible that defined provincial revenues would have exceeded \$25.0 million in 1999/2000 even without the decreased costs expected from the anomaly period. The operator and the Gaming Corporation should both want the improved returns anticipated from a new permanent casino,<sup>32</sup> since an earlier opening might have also resulted in changes to attendance figures and/or revenues.

The postponed opening date does, however, mean that the 1999/2000 fiscal year is expected to be complete before new Halifax amortization costs kick in. Given past financial performance of the casinos, it seems likely that this will also mean a greater chance the casinos will exceed the \$25.0 million provincial revenue limit during the crucial clawback year.

## CASINO REGULATION

The *Gaming Control Act* and Section 53 of the Casino Regulations govern the types of games permitted in Nova Scotia's two casinos. The casinos operate under a system of internal control procedures which are approved by the Authority and which govern all aspects of their operations. The Authority's compliance staff monitor casino operations to ensure adherence to the regulations. RCMP officers hired by the Authority supplement the casino surveillance, investigate incidences of cheat-at-play and conduct security clearance investigations for all gaming employees and suppliers. Slot machines in the casinos are subjected to rigorous testing and inspections by casino staff as well as by staff from the Authority's Investigation and Enforcement Division. All slot machines are tested to verify that they adhere to regulated payout percentages.

The Authority has established and approved detailed Rules of Play in regard to table games offered at the casinos to ensure that they are consistent with generally accepted industry standards. The play at table games is subject to various levels of internal and external scrutiny. Pit

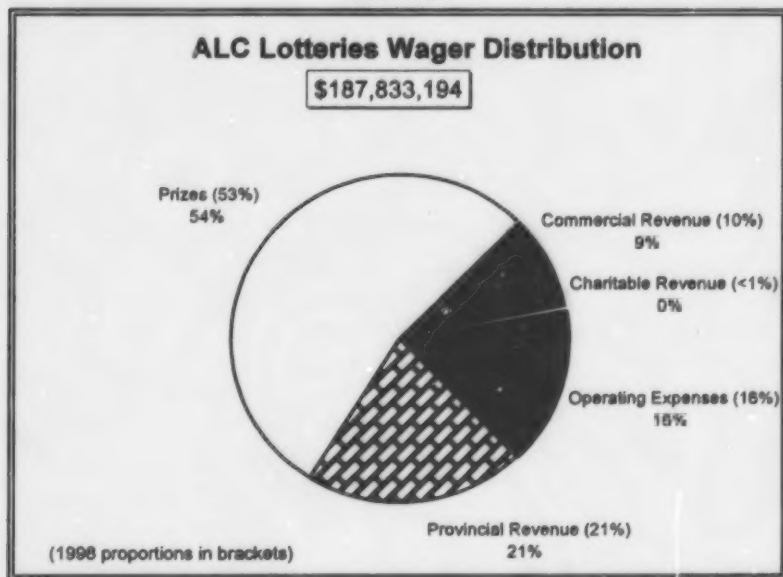
bosses monitor dealers and players, and otherwise supervise the activity at several tables concurrently. The games are also subject to constant surveillance by both casino staff and casino surveillance personnel. Table games with a mechanical component, such as roulette, are subject to physical examination by casino and Authority staff. Unlike slot machines, however, there is no computer-generated coin deposit record to keep track of these wagers. For purposes of estimating the total wager, therefore, the Alcohol and Gaming Authority uses the amount of chips purchased from the casino operation, since only chips can be used to wager at table games. Approved table games being played in Nova Scotia at the end of this fiscal year included: blackjack, roulette, Let it Ride<sup>®</sup> baccarat, poker and mini-baccarat.<sup>33</sup> The casino operator is in the process of evaluating and/or seeking Authority permission for several new games for casino play, including nickel slot machines, craps, sic bo, Spanish 21 and Red Dog.<sup>34</sup>

## ALC LOTTERIES

### THE FINANCIAL YEAR IN REVIEW

Although changes to the arrangement were being discussed during much of 1998/99, the Atlantic Lottery Corporation (ALC) continued this year to conduct and manage most ticket lotteries in Nova Scotia. Some of these lotteries are operated in conjunction with the Interprovincial Lottery Corporation, an organization incorporated in 1976 under the *Canada Business Corporations Act* which administers nationwide lottery games on behalf of Canada's 10 provinces.<sup>35</sup>

#### Item 2.12



ALC is responsible for two basic types of lottery schemes: on-line ticket sales and retail ticket sales. On-line tickets refer to items that are sold and validated by computer terminals operated by ALC and the Interprovincial Lottery Corporation, such as Lotto 6/49, Super 7, Pik 4, TAG, Atlantic

Choice, (\$1, \$2 and \$5) Instant, Special Event and Sport Select. Retail tickets, meanwhile, are the lottery tickets often found in glassed display cases at store check-out counters. They are sometimes referred to as "Instant" tickets, "Scratch'n Wins" or "Breakopens."

### Item 2.13

#### ALC Lotteries Wager Distribution

	1999	1998	Change
Operating Expenses	\$30,045,977	\$29,254,285*	2.7%
Commercial Revenue	17,920,967	17,919,003*	0.0%
Charitable Revenue	51,240	87,010	-41.1%
Provincial Revenue	38,690,855	38,416,269	0.7%
Prizes	101,124,155	96,634,561	4.6%
<b>TOTALS</b>	<b>\$187,833,194</b>	<b>\$182,311,128</b>	<b>3.0%</b>

\* Allocation between Operating Expenses and Commercial Revenue adjusted from AGA 1997/98 Annual Report.

In Nova Scotia in 1998/99, \$187.8 million was wagered on these traditional lottery products. That marks an increase of \$5.5 million or 3 per cent over 1997/98's total wager of \$182.3 million. Still, commercial revenue was \$17.9 million, the same as last year, and revenue to charities (through charitable breakopen tickets) actually dropped to \$51,240 in 1998/99 from \$87,010 in 1997/98. Only operating expenses and prizes increased in 1998/99, by \$791,692 and \$4.5 million respectively, over 1997/98 totals. Indeed, prizes accounted for 54 per cent of the lotteries' distributions in 1998/99, up from 53 per cent in 1997/98. Operating expenses and commercial revenue remained at 16 per cent and 10 per cent of the wager while revenues to charities continued this year to absorb less than one per cent of the wager. The only portion of the wager distribution that has decreased is the revenue paid to the Province, which went down to 20 per cent of the total wager in 1999 from 21 per cent in 1998.

The distribution of the wager is also worth observing in the context of a number of years.



### Item 2.14

ALC Lotteries Wager Distribution History				
	1999	1998	1997	1996
Operating Expenses	16%	16%	15%	14%
Commercial Revenue	10%	10%	9%	9%
Provincial Revenue	20%	21%	24%	25%
Prizes	54%	53%	52%	52%
<b>TOTALS</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

As Item 2.14 shows, the revenue apportioned to the Province as a share of the wager has declined consistently while the shares for operating expenses, revenue to commercial entities and prizes paid have increased marginally. This hints at the concerns that prompted the Province, through the Nova Scotia Gaming Corporation (the Gaming Corporation), to consider assuming control of its own section of the Atlantic lottery market. The Gaming Corporation has chosen to call this option "repatriation."

### REPATRIATION

Revenues from traditional lotteries' sales in Nova Scotia this year, as mentioned above, were \$187.8 million with a net profit to the Province of \$38.7 million. In 1996, the first year the Nova Scotia Alcohol and Gaming Authority (then the Nova Scotia Gaming Control Commission) prepared an Annual Report, the Province earned \$41.1 million profits on \$164.8 million in sales. In short, Nova Scotia now sells \$22.2 million more in tickets, but earns \$2.5 million less for the effort.

Incorporated in 1976 under the *Canada Business Corporations Act*, ALC is jointly and equally owned by the four Atlantic provinces. Its operations have been administered by corporate bylaws. The methodology for dividing profits between the shareholders was last reviewed in 1991.<sup>36</sup> In a nutshell, under the formula, each of the four Atlantic Provinces contributes jointly to ALC's operating costs, based on that province's percentage of total sales, including those for video lottery terminals. The cost of delivering services to that region are not a factor.<sup>37</sup>

After an audit by the Nova Scotia Auditor General in 1996 confirmed anomalies in the profit sharing formula, the Province's representative on the ALC board proposed an amendment that would require each province to bear the costs associated with sales generated in it's own province.<sup>38</sup> The Gaming Corporation said the new profit distribution system was required because Nova Scotia was essentially losing \$4.0 million to \$4.5 million each year under the existing formula.

There was more than money at stake, however. The Gaming Corporation was also requesting structural changes at ALC. The only member province to separate the administrative and regulatory aspects of gaming, Nova Scotia was in a difficult position when it came to accountability. As Nova Scotia's representative on ALC, the Gaming Corporation needed to be allowed better and swifter ability to respond to questions raised by the Alcohol and Gaming Authority regarding critical matters of concern, such as game integrity.

Despite protracted debate and an agreement in principle on revenue redistribution, the ALC board, which includes representatives from each of the four stakeholder Atlantic Provinces, could not reach the unanimous consent required to alter the system. On March 9, 1999, the Gaming Corporation announced it would withdraw from ALC unless the outstanding issues could be resolved. On March 29, 1999, the Minister of Finance made it official, announcing that the Gaming Corporation would take over the Province's share of video lottery operations by November 30, 1999 and traditional ticket sales by March 31, 2000.

Plans began for the repatriation, and sites were selected for some of the 110 estimated new jobs just before a provincial election campaign got under way. During that campaign, questions relating to ownership of existing video lottery terminals and to the viability of the repatriation were discussed. Shortly after being elected to the post in the summer of 1999, the Premier said that, given his commitment to regional co-operation, his Government would review the Gaming Corporation plan to repatriate.

### **Reviewing The Financial Consequences**

Under the disputed ALC profit sharing plan, each province pays a share of the overall operating costs. This share is based on net sales for that

province, but, as mentioned above, does not take into consideration the actual cost of delivery of those services. In 1999, for example, Nova Scotia paid 39 per cent of ALC's operating expenses of \$18.9 million relating to regular lottery business.<sup>39</sup> However, there was no accounting that could demonstrate that \$18.9 million was the cost of delivery of ALC programs in Nova Scotia. In this age of computerized services, it should not be difficult to better apportion the actual costs of delivery of services.

It is not good enough, however, to look simply at the share of profits when discussing a partnership such as the one that formed ALC. After all, sound partnerships are premised on the notion of mutual benefit for all involved. From a global perspective, more than just direct employment for each province must also be considered. With this in mind, the Auditor General's report of 1996 looked also at an assessment of the combined wages and purchasing power allotted each of the provinces.<sup>40</sup>

#### Item 2.15

##### Summary Of ALC Economic Benefits Study 1994/95 Auditor General's Report, 1996

	Total \$ Value Purchases & Salaries	% Of ALC Total Purchases & Salaries	Jurisdiction's % Of ALC's Net Revenue
Newfoundland	\$6,861,342	11.88%	28.90%
Prince Edward Island	618,066	1.07%	5.30%
New Brunswick	15,446,876	26.75%	26.60%
Nova Scotia	11,089,013	19.20%	39.20%
Other	23,731,278	41.10%	0.00%
<b>TOTALS</b>	<b>\$57,746,575</b>	<b>100.00%</b>	<b>100.00%</b>

Source: Atlantic Lottery Corporation Inc. 1996 Shareholder's Audit, Assignment Report. Data for March 31, 1995.

As Item 2.15 shows, 1995 data given by ALC to its shareholders shows that New Brunswick received 45 per cent of the wage and purchasing activity of ALC while accounting for only 27 per cent of sales. Nova Scotia

received 33 per cent of the economic activity but was responsible for 39 per cent of the sales.

That information can, however, be restated to make the comparisons between the four Atlantic Provinces clearer by excluding the purchases and wages made outside the Atlantic Provinces, as in Item 2.16.

#### Item 2.16

<b>Summary Of ALC Economic Benefits Study 1994/95 Excluding Other Jurisdictions</b>				
	<b>Total \$ Value Purchases &amp; Salaries</b>	<b>% Of ALC Total Purchases &amp; Salaries</b>	<b>Jurisdiction's % Of ALC's Net Revenue</b>	<b>Variance</b>
Newfoundland	\$6,861,342	20.17%	28.90%	-8.73%
Prince Edward Island	618,066	1.82%	5.30%	-3.48%
New Brunswick	15,446,876	45.41%	26.60%	18.81%
Nova Scotia	11,089,013	32.60%	39.20%	-6.60%
<b>TOTALS</b>	<b>\$34,015,297</b>	<b>100.00%</b>	<b>100.00%</b>	

Source: Atlantic Lottery Corporation Inc. 1996 Shareholder's Audit, Assignment Report. Data for March 31, 1995.

This simple analysis shows that, in 1995, New Brunswick received an estimated 19 per cent (or \$6.5 million) economic advantage over its provincial partners through direct economic activity and that the lost economic value to Nova Scotia because of inequitable spending was nearly 7 per cent of the total spending, or about \$2.2 million.

ALC's full economic impact on Nova Scotia or any other stakeholder province, however, could only be more accurately estimated if detailed data allowed assessment of wages and purchasing shares over a period of at least five years and only if the different economic values of, for example, wages versus purchases are carefully assessed for their value as economic generators. That information, however, has not been made available to the public.

That being said, the Gaming Corporation completed its own assessments and decided that repatriation made sense. In addition, the Gaming Corporation commissioned external studies from Ernst & Young and Transformation Consulting to determine if it made financial sense for lotteries to be operated by the Province. The consultants apparently confirmed that a provincially operated lottery corporation would be economically viable. Concerns arose about a possible dispute over the ownership of the video lottery terminals currently in Nova Scotia. These concerns appear, however, to miss the facts that plans are already afoot to replace many of the dated video lottery terminals and that each of the provincial shareholders has the right to compensation for assets, as stated in their shareholder agreements, upon any dissolution.

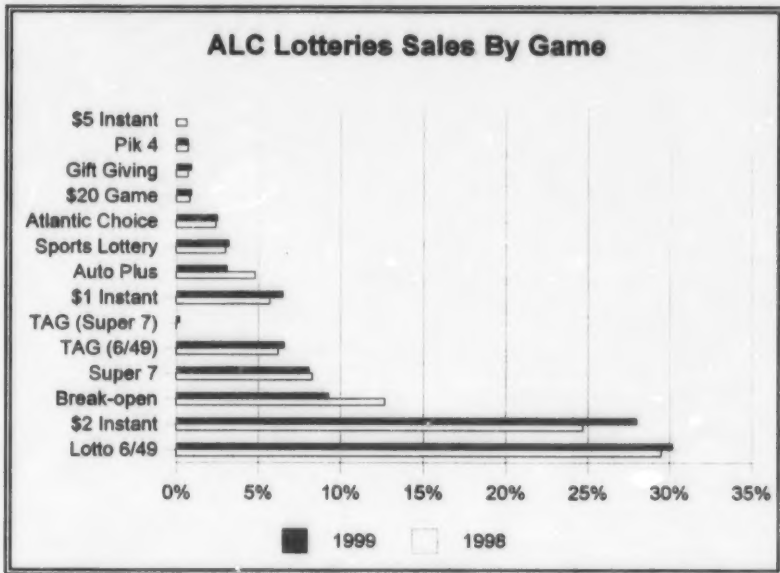
In the end, then, the final analysis is better left to those more familiar with the detailed financial intricacies. Nova Scotia's options, however, are clear: It can opt for the status quo; renegotiate the ALC profit-sharing deal and pertinent regulations; repatriate lottery operations; or establish some sort of affiliation with other lottery operators. Each of these options must be weighed carefully for its full financial effects and its ability to ensure fairness and accountability as well as any other pertinent implications.

## **THE GAMES PEOPLE PLAY**

One thing remains clear no matter what decision is ultimately made regarding repatriation: Nova Scotians like to wager on lotteries. In 1999, Lotto 6/49 remained the most popular game on the interprovincial roster, accounting for the second year in a row for about 30 per cent of the lotteries' wager in Nova Scotia. In all, \$56.6 million was wagered on that one game alone in 1999, up from \$53.8 million in 1998.

As Item 2.17 shows, the selection of preferred games continues to change. Some new games, like the TAG or Super 7, were added and others, like the \$5 Instant ticket, were eliminated. Certain products, like the \$2 Instant and \$1 Instant games saw substantial growth in sales in 1999 (17 and 18 per cent over 1998 sales), while others, like Auto Plus which saw sales dip to \$5.8 million in 1999 from \$8.8 million, declined dramatically.

### Item 2.17



In January 1999, ALC withdrew its breakopen tickets from the market after manufacturing irregularities were identified that might allow some players to identify winning tickets.<sup>41</sup> The products were reintroduced first in Newfoundland and later in Nova Scotia. The absence of these breakopen tickets cost the Gaming Corporation about \$100,000 in net profit per week.<sup>42</sup> It also cost ticket retailers approximately \$60,000 in net sales per week,<sup>43</sup> and may account for much of an overall decrease of 24 per cent in sales of breakopens in 1999 when compared with 1998 rates.

ALC also experienced difficulties this fiscal year with its Pro-Line game. A single bettor netted \$1.7 million in winnings after allegedly noticing that the sports lottery had based its mid-February week's wager on team lineups that were in place prior to a National Basketball Association strike. All Atlantic area Pro-Line payouts were reduced by 5 per cent when the \$1.7 million pot pushed winnings above ALC's \$2.5 million liability cap.<sup>44</sup> Wagering on some other games was also suspended. As a result of this case, ALC reassessed its policies and took additional steps aimed at curbing block betting.<sup>45</sup>

Also of concern in this case, was the apparent perception by some members of the public that use of the liability cap itself was somehow irregular.<sup>46</sup> In fact, while the process is properly included in ALC legal disclaimers, it became apparent during this incident that many players did not understand that the use of a cap is a standard practice in gaming that relies on shared-pot prizes.<sup>47</sup> This could be because details about the cap can be sought in rules available upon request but are not routinely printed on the back of tickets.

## REGULATORY CONCERNS

In addition to issues relating to game integrity, the Alcohol and Gaming Authority also continued in the past year to monitor, among other things, the advertising of ALC lotteries. In the 1998/99 fiscal year, as in previous years, ALC was responsible for overseeing the production, distribution, marketing and promotion of retail tickets.

The Alcohol and Gaming Authority continues, however, to see a need for improved regulatory accountability. As noted in the 1997/98 Annual Report, the Authority questions the markets being targeted by offerings such as a Father's Day promotion card that was electronically enhanced with music and featured both cartoon depictions and scratch tickets. Teenagers in recent focus groups conducted by the Authority also noted that some marketing attempts appeared to be aimed at attracting younger players. Tickets that feature popular traditional games (like Crossword and Bingo) were popular with those teens who played scratch tickets (see fuller report Chapter 4). Although there is currently no law banning minors from purchasing tickets, ALC agreements with retailers forbid the practice and permit removal of machines from retailers who breach that clause repeatedly.<sup>48</sup>

ALC assures the Authority it abides by the Canadian Advertising Code of Ethics. The North American Association of State and Provincial Lotteries, meanwhile, developed in March of 1999 a list of advertising standards for its member lotteries.

Still, the Authority believes that more specific standards on advertising are in order. It is not alone. The National Gambling Impact Study

Commission Final Report in the United States and the Australia Productivity Commission's draft report on Australia's Gambling Industries each favour regulations that forbid aggressive advertising strategies targeting either youth or other vulnerable audiences. Appropriate regulations might also deal more forcefully with matters affecting public education, including the odds of winning.

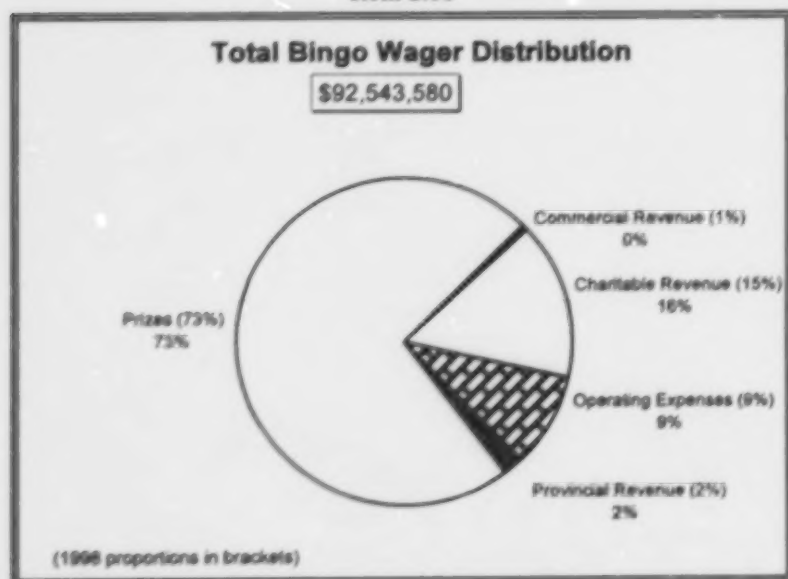


## BINGO

### THE FINANCIAL YEAR IN REVIEW

At 9 per cent of the total provincial wager, bingo represents one of the smaller portions of Nova Scotia's gaming industry. Still, combined figures for charitable and commercial bingos show that the game is a popular way for charities to raise funds and for Nova Scotians to spend their time and money. In fact, \$92.5 million was wagered on bingos in 1998/99, an increase of \$1.9 million over the total 1997/98 bingo wager.

Item 2.18



Importantly, 15 per cent of that total wager goes directly into the coffers of charitable causes. That means that \$14.3 million was available for minor sports leagues, volunteer firefighters, religious or community service organizations to pump back into their respective communities. Commercial operators, meanwhile, received revenues accounting for less

than one per cent of the total wager and the Province itself only received revenue of two per cent, decreasing its actual take to \$1.5 million in 1998/99 from \$1.6 million in 1997/98. That is all part of the plan set out when the Province approved Bingo Regulations in 1995 that focussed the charitable bingo sector on earning bigger profits for their charitable purposes. Among other things, those regulations continue a policy implemented in the 1980s that forbids the creation of any new commercial bingos, thereby limiting all new bingo proceeds to charitable purposes. The regulations also have required that charitable or religious organizations return at least 15 per cent of their events' revenues to that charity or religious group for its work in the community.

#### Item 2.19

##### Bingo Licensees Grouped By Wager

Category	Licensees	%	Wager	%
\$0-50,000	191	33.8%	\$2,142,460	2.3%
50,000-100,000	97	17.2%	7,013,385	7.6%
100,000-150,000	76	13.5%	9,485,478	10.3%
150,000-200,000	64	11.3%	11,136,778	12.0%
200,000-250,000	41	7.3%	9,109,417	9.8%
250,000-300,000	29	5.1%	7,930,092	8.6%
300,000-500,000	26	4.6%	9,979,011	10.8%
500,000-1,000,000	32	5.7%	21,653,092	23.4%
\$1,000,000+	9	1.6%	14,093,867	15.2%
<b>TOTALS</b>	<b>565</b>	<b>100.0%</b>	<b>\$92,543,580</b>	<b>100.0%</b>

Of course, not all bingos are created equal. Most events are small in scale: local events that, for example, may help an elementary school earn a few hundred dollars for a class trip. Others, are larger productions, aimed at earning their charities millions of dollars. In fact, that small number of large bingos earns the lion's share of the money.

As Item 2.19 shows, more than 50 per cent of bingo licenses are issued for bingos with gross receipts of \$100,000 or less. The remaining 50 per cent of licensees, however, are responsible for almost \$83.4 million of the wager, the largest share (90 per cent) of the total \$92.5 million total wager recorded. In fact, bingos in just two categories, those with gross receipts of \$500,000 to more than \$1.0 million, account for only 7 per cent of all licensees. Still, they are responsible for \$35.7 million in revenues or 39 per cent of the total wager.

In all, the Alcohol and Gaming Authority issued 473 series and 229 single bingo licenses in 1998/99. As the names suggest, bingo series licenses allow the operation of a number of bingo events over a period of time while single licenses are issued for isolated events.

To further clarify issues relating to bingos, the financial information on this activity is presented in two further sections, one detailing charitable bingos, the other commercial enterprises.

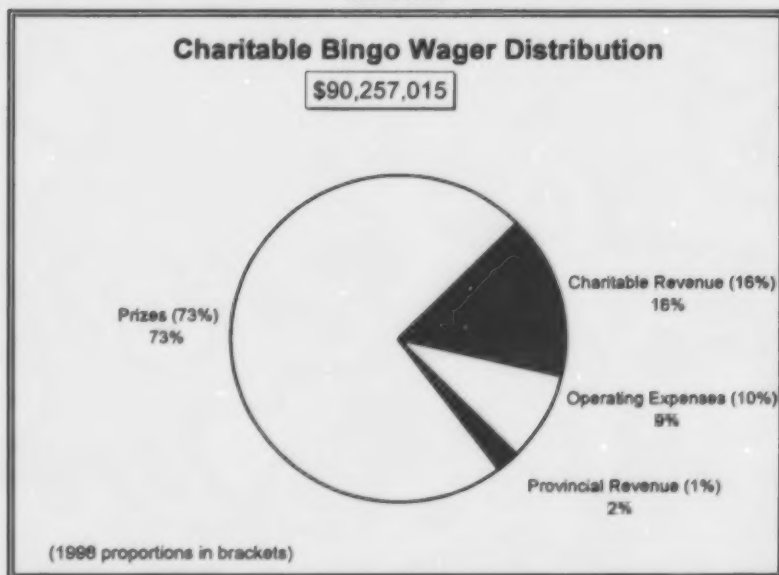
## **CHARITABLE BINGO**

Charitable Bingo is the term used in this report to describe bingos operated by organizations which have met *Criminal Code* and regulatory standards, and have been given bingo licenses by the Authority. In order to receive a series or single license, these organizations must have a charitable or religious purpose, provide benefit to the community, and wish to use funds raised at the bingo to finance their activities and support their causes. The idea is that volunteer fire departments, churches, schools, minor league sports teams, legions or similar groups may use licensed bingos to raise funds within their own communities, potentially avoiding greater dependence upon philanthropy or government funding.

This year, \$90.3 million was wagered at charitable bingos. That marked an increase of \$4.1 million over last year's total of \$86.2 million. Some of that increase may be attributed to simple bookkeeping; bingo licensees having brought monthly reports up to date. Another part of the hike could be the result of some clients switching to charitable events after the closure in 1997/98 of one commercial outlet. An increase in the profitability of TV bingos across the Province may also have played a part in the hike. In

1998/99, the 33 licensees with televised bingo games accounted for only 6 per cent of the total number of charitable licensees. But those licensees were responsible for events with a total wager of more than \$4.5 million in 1998/99, up \$776,000 from 1997/98's total of \$3.8 million. They also managed to bring in \$1.9 million for their respective charities, making that small yet profitable part of the charitable bingo wager responsible for 13 per cent of the total sector's net return.

#### Item 2.20



Overall, \$66.2 million, or 73 per cent of the total \$90.3 million wagered at Nova Scotia's charitable bingos, was used for prizes. Operating expenses totalled another \$8.4 million or 9 per cent of the wager. After revenues to the Province of \$1.3 million (2 per cent of the wager) were paid, the licensed charities themselves were left with \$14.3 million in revenues or 16 per cent of the amount wagered on charitable bingos.

**Item 2.21**

<b>Charitable Bingo Wager Distribution</b>			
	<b>1999</b>	<b>1998</b>	<b>Change</b>
Operating Expenses	\$8,388,510	\$8,282,369	1.3%
Charitable Revenue	14,303,015	13,522,025	5.8%
Provincial Revenue	1,324,814	1,261,782	5.0%
Prizes	66,240,676	63,089,109	5.0%
<b>TOTALS</b>	<b>\$90,257,015</b>	<b>\$86,155,285</b>	<b>4.8%</b>

That \$14.3 million means that charities and religious groups had nearly \$1 million more for themselves in 1998/99 than they did in 1997/98. Only a few years ago, there was no real way of knowing how much of the money being raised in bingos was actually going to the event's stated cause. Data collection was sketchy and regulations did not require charities to account in detail for their financial dealings.<sup>49</sup>

As mentioned earlier, Bingo Regulations, put in place in 1995, changed all that. One of the new regulations, for example, insisted that at least 15 per cent of all revenues from each bingo event be dedicated to the charitable or religious cause named in the fundraiser. Introduction of the new regulations caused some concern in an industry that previously had not been constrained by such reporting demands.<sup>50</sup>

The concerted efforts of bingo operators and Authority licensing staff, however, have helped ensure the kind of accountability necessary to protect licensees and players while helping charities get the most value from their events.

For the past two years, most charities have been able to meet the legislated requirement that they get 15 per cent return from their bingos. This year, for example, 288 of the 562 licensees (51 per cent) exceeded the legislated minimum and only 51 (9 per cent) reported losing money. That left, however, 223 of the charitable and religious licensees (40 per cent) having earned some profits from their events, but not yet having reached the 15 per cent return. Authority licensing staff continue to work with these groups, studying such factors as geographic location, prizes, administrative costs

and the like to help licensees earn better returns for their charitable causes. With such scrutiny, licensees can better understand why results from these events can vary so widely. Participants whose events have gross receipts under \$150,000, for example, accounted collectively for 90 per cent of the licensees that lost money at charitable bingos in 1998/99. Eight licensees in those categories, however, also managed to get net returns of higher than 60 per cent, helping to stabilize the group and keeping the net revenues to charities this year at 16 per cent overall, the same as last year.

### Item 2.22

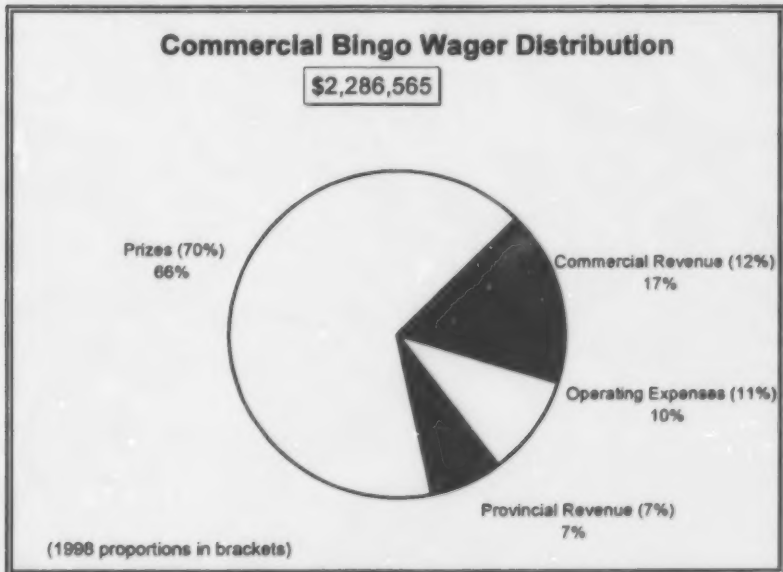
Charitable Bingo Licensees Net Profits					
Category	Licensees	Licensees By Net Profit			Average Net Profit
		<0%	0-15%	>15%	
\$0-50,000	191	33	110	48	16%
50,000-100,000	96	9	41	46	15%
100,000-150,000	76	4	29	43	13%
150,000-200,000	64	2	32	30	16%
200,000-250,000	41	2	21	18	17%
250,000-300,000	28	0	14	14	16%
300,000-500,000	26	1	18	7	21%
500,000-1,000,000	32	0	18	14	14%
\$1,000,000+	8	0	5	3	17%
<b>TOTALS</b>	<b>562</b>	<b>51</b>	<b>288</b>	<b>223</b>	<b>16%</b>

The part of the wager dedicated to charitable purposes was not the only portion of the wager to remain consistent. The portion reserved for the Province in 1998/99 remained the same as in 1997/98, at less than two per cent of the charitable bingo wager. Operating expenses were reduced marginally from 1997/98 levels but still accounted for about 9 per cent of the total, and prizes increased marginally but still accounted for about 73 per cent of the money wagered. Still, the total value of prizes adds up: only 21 per cent of the 562 charitable bingo licensees in 1998/99 had total prize packages valued at under \$5,000 and a total of \$66.2 million in prizes was paid to players of charitable bingos.

## COMMERCIAL BINGO

When Nova Scotia introduced comprehensive Bingo Regulations in 1995, it included a rule that forbids establishing any new commercial licensing. The regulations did allow existing or “grandfathered” commercial bingos to continue their operations. By 1998/99, three privately-owned bingos continued to do business in the Province.

### Item 2.23



Prohibited by regulation from having prizes in excess of \$100 per game, those three operators nonetheless had a total of \$1.5 million in prizes for the year. This accounts for 66 per cent of the total commercial wager, less than the charitable bingo prize portion of 73 per cent and down from last year when prizes amounted to 70 per cent of the commercial bingo wager. As required, the bingo operators forwarded 10 per cent of the value of those prizes to the Province. In 1998/99, that meant revenues to the Province of \$152,324 or less than 7 per cent of the commercial bingo category's wager. The operators tallied \$388,205, or 17 per cent of the wager, in net profit and recorded \$222,792, or 10 per cent of the wager, in expenses. These

amounts mark another shift in financial activity when compared with 1997/98 results, when operating expenses accounted for 11 per cent but revenue to the commercial operators only garnered 13 per cent.

#### Item 2.24

<b>Commercial Bingo Wager Distribution</b>			
	<b>1999</b>	<b>1998</b>	<b>Change</b>
Operating Expenses	\$222,792	\$483,488	-53.9%
Commercial Revenue	388,205	560,906	-30.8%
Provincial Revenue	152,324	312,950	-51.3%
Prizes	1,523,244	3,129,497	-51.3%
<b>TOTALS</b>	<b>\$2,286,565</b>	<b>\$4,486,841</b>	<b>-49.0%</b>

Accounting for less than 3 per cent of the total bingo wager, the three commercial properties had total wagers of nearly \$2.3 million, a decrease of 49 per cent over the 1997/98 commercial bingo total of \$4.5 million wagered. This decrease was mirrored by drops of 54 per cent in operating expenses, 31 per cent in revenues to operators, 51 per cent to the Province and in prizes. Those discrepancies, however, can be readily explained by the fact that four commercial licensees were still in operation for a portion of the 1997/98 fiscal year.

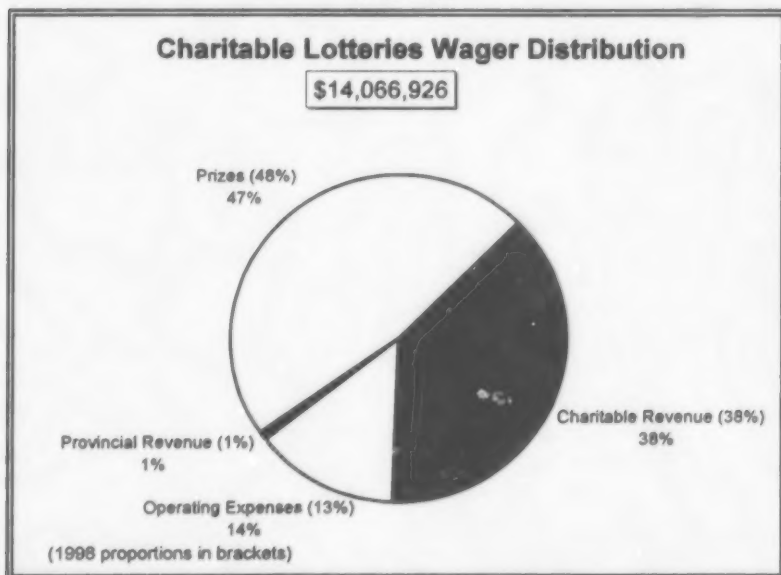


## CHARITABLE LOTTERIES

### THE FINANCIAL YEAR IN REVIEW

Like bingos, charitable lotteries continue to be a common way for community groups to raise much-needed revenues. Indeed, this type of wagering registered the largest increase in activity in the provincial gaming industry when compared with last year's results. In 1999, \$14.1 million was wagered on charitable lotteries. That marks a 21 per cent increase over 1998's charitable lotteries' wager of \$11.6 million.

#### Item 2.25



Still charitable lotteries – the 50/50 draws at hockey games, the church raffles, the lotteries that can feature prizes as varied in value as a sports bag and a home – account for only 1 per cent of all the wagering done in the Province. The premise of this type of gambling is, of course, simple: supporters buy a ticket from a charitable or religious group for a chance to

win either merchandise or cash prizes. To help ensure that as much money as possible goes directly toward the charitable or religious cause, organizers of these lotteries are encouraged to curtail their administrative expenses. Licensees are also encouraged to spend their lottery profits directly in the Province.

In 1998/99, the Province's portion of the charitable ticket and lotteries wager remained constant with last year's level, coming in at about 1 per cent of the total wager. Operating expenses took about 14 per cent of the wager, and prizes accounted for another 46 per cent. That left 39 per cent of the charitable ticket and lotteries wager for distribution among charitable causes.

Indeed, while charitable tickets and lottery sales represent the smallest portion of the Province's gaming activity, they can mean big money for the charities involved.

#### Item 2.26

Charitable Lotteries Wager Distribution			
	1999	1998	Change
Operating Expenses	\$1,973,733	\$1,558,144	26.7%
Charitable Revenue	5,417,395	4,413,603	22.7%
Provincial Revenue	130,338	122,149	6.7%
Prizes	6,545,460	5,555,400	17.8%
<b>TOTALS</b>	<b>\$14,066,926</b>	<b>\$11,649,296</b>	<b>20.8%</b>

Charitable groups got \$5.4 million for their works from lotteries, raffles and other games in 1998/99, an increase of 23 per cent over the \$4.4 million total in 1997/98. The actual amount given out in prizes was up, too, to \$6.5 million from \$5.5 million, an increase of nearly 18 per cent, while the Province's share increased to \$130,338 from \$122,149, a hike of 7 per cent over 1997/98's total. Operating expenses, meanwhile, saw a year over year increase of almost 27 per cent to nearly \$2.0 million from \$1.6 million in 1997/98.

The overall increase of \$2.4 million in the charitable tickets and lotteries' wager may also be an offshoot of an increasing number of larger ticket lotteries. Indeed, it has not been difficult to notice in recent years the increasing number of charitable groups holding draws for homes, cottages, cars or other big-ticket prizes. As previous editions of this Annual Report have indicated, these big-prize events can be risky. Charitable groups in the past have had to extend their contest time frames in order to sell enough tickets to cover the costs associated with large prizes.

Most of the charitable ticket lotteries sold in the Province are still of the small variety. More than \$5.1 million was wagered on a total of 757 community, religious or other charitable events with gross receipts totalling less than \$50,000. A large and increasing portion of the wager, however, can be found in categories in which licensees have more than \$250,000 in gross receipts.

#### Item 2.27

<b>Charitable Lotteries Licensees Grouped By Wager</b>				
<b>Category</b>	<b>Licensees</b>	<b>%</b>	<b>Wager</b>	<b>%</b>
\$0-50,000	757	94.0%	\$5,140,988	36.5%
50,000-100,000	24	3.0%	1,662,531	11.8%
100,000-150,000	8	1.0%	940,303	6.7%
150,000-200,000	2	0.2%	340,540	2.4%
200,000-250,000	2	0.2%	447,306	3.2%
250,000-300,000	1	0.1%	292,947	2.1%
300,000-500,000	7	0.9%	2,839,667	20.2%
500,000-1,000,000	4	0.5%	2,402,644	17.1%
\$1,000,000+	0	0.0%	0	0.0%
<b>TOTALS</b>	<b>805</b>	<b>100.0%</b>	<b>\$14,066,926</b>	<b>100.0%</b>

In 1998/99, as Item 2.27 shows, the 7 licensees in a category that had gross receipts of between \$300,000 and \$500,000 brought in more than \$2.8 million in gross wagers, or 20 per cent of the charitable ticket and lotteries full total, yet represented less than 1 per cent of the total number of

licensees. Conversely the number of licensees with gross receipts in the \$0 to \$50,000 range—the vast majority of which have prizes valued at under \$10,000—decreased dramatically in 1998/99, to 757 from 871 in 1997/98, although the total gross wager for this category remained almost constant at about \$5.0 million.

In 1998/99, the Alcohol and Gaming Authority continued its implementation of a new, computerized licensing system. This system should help expedite renewals for the hockey teams, fire department auxiliaries and other groups that have charitable ticket games and/or lotteries annually. That may represent a good number of participants in this sector. In 1998/99, a total of 990 licenses were issued to 805 licensees for these events. That marked a slight increase in the number of licenses (from 966 in 1997/98), but a decrease of 108 in the number of licensees. In all, charities and religious groups were licensed for 401 ticket single licenses (a single draw offering a prize valued at more than \$500) and 589 ticket series licenses (authorization for a series of draws during a specified period of time that does not exceed 12 months). Again, the licensing numbers contrast last year's totals when ticket singles registered a higher 568 and ticket series a lower 398.

In addition, the Alcohol and Gaming Authority issued licenses for 78 breakopen ticket games (down from 101 in 1997/98) and 124 games of chance (down from 176 in 1997/98).

## NOTES FOR CHAPTER 2

- 1 Food and beverage revenue from the casinos are included in the numbers presented for the casinos, however, expenses relating to food and beverage are also included.
- 2 Nova Scotia Gaming Foundation Regulations, March 19, 1998.
- 3 Nova Scotia Gaming Foundation (March 31, 1999). Financial Statements, p. 4.
- 4 Nova Scotia Gaming Foundation (March 31, 1999). Financial Statements, p. 3.
- 5 Nova Scotia Gaming Foundation (March 31, 1999). Financial Statements, p. 4.
- 6 Nova Scotia Gaming Foundation (March 31, 1999). Financial Statements, p. 4.
- 7 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 19.
- 8 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 20.
- 9 Daily News (May 26, 1999). VLTs must meet quota, Halifax, N.S.
- 10 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 21.
- 11 Nova Scotia Standing Committee on Community Services (1999). Socioeconomic Impact of Video Lottery Terminals, p. 76.
- 12 Court of Queen's Bench of Alberta, Judicial District of Edmonton (March 4, 1999). Oil Sands Hotel (1975) Ltd. v Alberta Gaming and Liquor Commission.

- 13 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 20.
- 14 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 20.
- 15 Productivity Commission (July 1999). Australia's Gambling Industries, Draft Report, Canberra, p. 15.1.
- 16 Productivity Commission (July 1999). Australia's Gambling Industries, Draft Report, Canberra, p. 15.1.
- 17 Nova Scotia Gaming Corporation (March 31, 1999). Nova Scotia Gaming Corporation and Nova Scotia Harness Racing Incorporated Financial Statements, p. 6, 3a)ii).
- 18 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 23.
- 19 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 27.
- 20 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 25.
- 21 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 25.
- 22 Nova Scotia Gaming Corporation (March 31, 1999). Nova Scotia Gaming Corporation and Nova Scotia Harness Racing Incorporated Financial Statements, p. 4, item 2(d).
- 23 Operating Contract between Metropolitan Entertainment Group, Nova Scotia Gaming Corporation and Sheraton International Inc., Section 7.1.4, May 31, 1995.
- 24 Nova Scotia Gaming Corporation (March 31, 1999). Nova Scotia Gaming Corporation and Nova Scotia Harness Racing Incorporated Financial Statements, p. 5, item 2(d).

- 25 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 27.
- 26 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 27.
- 27 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 26; and Amendments to the Casino Regulations dated October 6, 1998.
- 28 Daily News (September 9, 1999). Casino faces \$2.2 m fine, Halifax, N.S.
- 29 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 27.
- 30 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 24.
- 31 Nova Scotia Gaming Corporation (March 31, 1999). Nova Scotia Gaming Corporation and Nova Scotia Harness Racing Incorporated Financial Statements, p. 15.
- 32 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 26.
- 33 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 22.
- 34 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 24.
- 35 Nova Scotia Gaming Corporation (March 31, 1999). Nova Scotia Gaming Corporation and Nova Scotia Harness Racing Incorporated Financial Statements, p. 10, item 6.
- 36 Nova Scotia Gaming Corporation (March 9, 1999). News Release, Backgrounder: Lottery Profit Formula.

- 37 Nova Scotia Gaming Corporation (March 9, 1999). News Release, Backgrounder: Lottery Profit Formula.
- 38 Nova Scotia Gaming Corporation (March 9, 1999). News Release, Backgrounder: Lottery Profit Formula.
- 39 Nova Scotia Gaming Corporation (March 31, 1999). Annual Report, p. 16.
- 40 Nova Scotia Auditor General (1996). Atlantic Lottery Corporation Inc. 1996 Shareholder's Audit, Assignment Report, p. 43.
- 41 The Telegram (February 19, 1999). Atlantic Lotto pulls ticket contract, St. John's, Nfld.
- 42 Nova Scotia Gaming Corporation (June 4, 1999). Nova Scotia Gaming Corporation Business Plan 1999-2000, p. 21.
- 43 Nova Scotia Gaming Corporation (June 4, 1999). Nova Scotia Gaming Corporation Business Plan 1999-2000, p. 21.
- 44 Atlantic Lottery Corporation (February 17, 1999). Pro-Line player wins \$1.7 million, ALC news release, Moncton, <http://www.newswire.ca/releases.html>.
- 45 Atlantic Lottery Corporation (1998-1999). Annual Report, p. 10.
- 46 Sunday Daily News (February 21, 1999). Thumbs up, thumbs down, Halifax, N.S.
- 47 The Chronicle-Herald (February 13, 1999). Pro-Line picks winners' pockets, Halifax, N.S.
- 48 The Chronicle-Herald (September 23, 1999). Gambling Execs Discuss How to Stem Addiction, Halifax, N.S.
- 49 Nova Scotia Lottery Commission (June 28, 1993). Gaming in Nova Scotia, An Initial Report and Recommendations to the Government of Nova Scotia.



- 50 Nova Scotia Gaming Control Commission (1995-1996). A Year in Review: Gaming in Nova Scotia, The First Annual Report of the Nova Scotia Gaming Control Commission, pp. 28-31.



# CHAPTER

## PUBLIC INTEREST AND REACTION

### INTRODUCTION

Pursuant to section 56(1) of the *Gaming Control Act*, the Alcohol and Gaming Authority (the Authority) is mandated to:

**(d) carry on a continuous study of the public interest and reaction of residents of the Province to existing and potential features of casinos, and other lottery schemes and games of chance.**

The Authority continues to monitor participation, perceptions, attitudes, and reactions to gaming in the province through studies and consultation with stakeholders, problem gambling service providers, and other interested parties. As in past years, the Authority identified research activities that would explore topical issues in a fiscally responsible manner. The tasks undertaken during the previous year to examine the public interests and reactions to gaming are:

1. a survey to measure the public's participation, general attitudes and specific opinions about gaming related issues, and awareness of problem gambling in Nova Scotia;
2. production of a problem gambling resource guidebook to assist people who feel they have a gambling related problem;
3. interviews with various service agencies and organizations to develop a better understanding of how to help problem gamblers at the community level.

Additionally, as previously noted, the government of Nova Scotia proclaimed a moratorium on VLTs, and ordered a socioeconomic study of video lottery play.

This chapter is a summary and synthesis of the research findings, and a discussion of continuing developments in gaming in the province.

## ***PREVALENCE AND PERCEPTIONS OF GAMING***

In 1999, the Authority contracted Focal Research Consultants to carry out a province-wide survey to monitor public participation, attitudes, knowledge, and awareness of gaming in Nova Scotia (Appendix A). A randomly selected sample of 600 adults participated in the survey, providing results deemed accurate within  $\pm 4$  per cent, 19 times out of 20. Where possible, Focal Research compared the results with three surveys previously conducted for the Authority (Omnifacts Research, 1996; Corporate Research Associates, 1997; Sterling Research, 1998).<sup>1</sup>

## **PARTICIPATION IN GAMING ACTIVITIES**

Item 3.1 presents the participation in various gaming activities for 1999, as found in the survey. On-line tickets, raffles, and instant tickets continue to be the most widely engaged in form of gaming. Participation in on-line and instant lottery tickets remained relatively stable between 1996 and 1999.<sup>2</sup>

**Item 3.1****Participation And Frequency Of Play**

	<b>Participation</b>	<b>Frequency &gt;=once/week</b>
Halifax casino	26%	—
Sydney casino	10%	< 1%
VLT	20%	14%
Bingo	17%	14%
On-line tickets	77%	33%
Instant tickets	57%	12%
Pro-Line tickets	6%	22%
Charity raffles	64%	2%

Source: A Survey of the Prevalence and Perceptions of Gaming in Nova Scotia, 1999

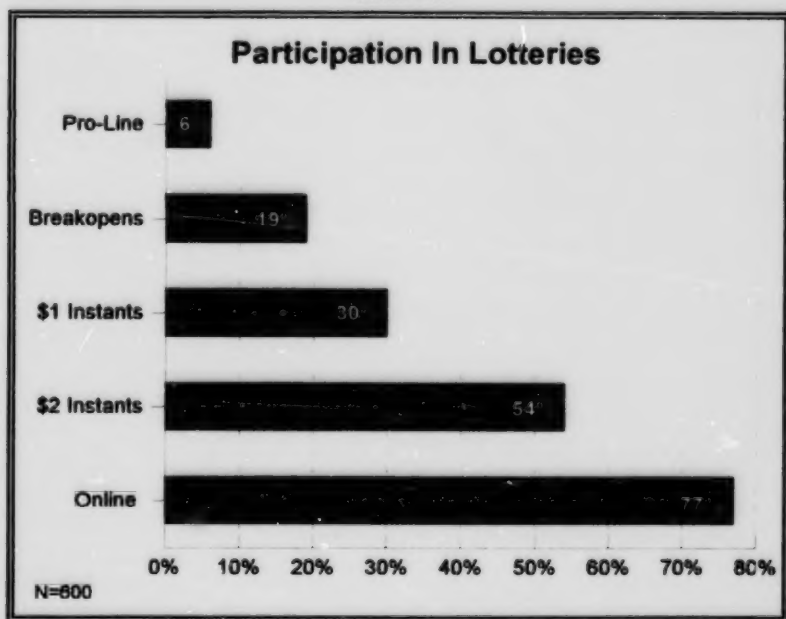
Since 1997, participation at the Halifax casino has continued at 26 per cent. Still, weekly play has dropped from 3 per cent of the sample in 1998 to none of the 1999 sample reporting weekly play at the Halifax casino. The Sydney casino seems to be attracting fewer players overall, with a high of 24 per cent in 1997, dropping to 10 per cent in 1999. Weekly play also appears to have decreased since 1997 at the Sydney casino, from approximately 5 per cent to less than 1 per cent in 1999.

As in other years, some of the survey respondents reported engaging in activities that either do not fall within the jurisdiction of the Alcohol and Gaming Authority or are illegal. Participation in sports pools has been constant at  $\approx 7$  per cent to  $\approx 11$  per cent.<sup>3</sup> Eighteen per cent of respondents reported playing card games for money outside of a casino in 1999. This is consistent with 1997 numbers, however, questions in both surveys included card games at a residence. When card games at a residence and casino are excluded, the participation rates drop to roughly 5 per cent. Horse betting (3 per cent) and Internet gambling (<1 per cent) have remained constant since 1996. The remaining activities regulated by the Authority are discussed at length below.

## Lotteries

According to the survey, lotteries (including Lotto 649, Super 7, Scratch-N-Win, Breakopens, and Pro-Line) continue to garner the highest gaming participation in the province. In this year's survey, eighty-five per cent of respondents reported purchasing lottery tickets in the previous year. On-line tickets remain the most widely purchased lottery tickets, with 77 per cent having participated in these lotteries (Item 3.2).

Item 3.2



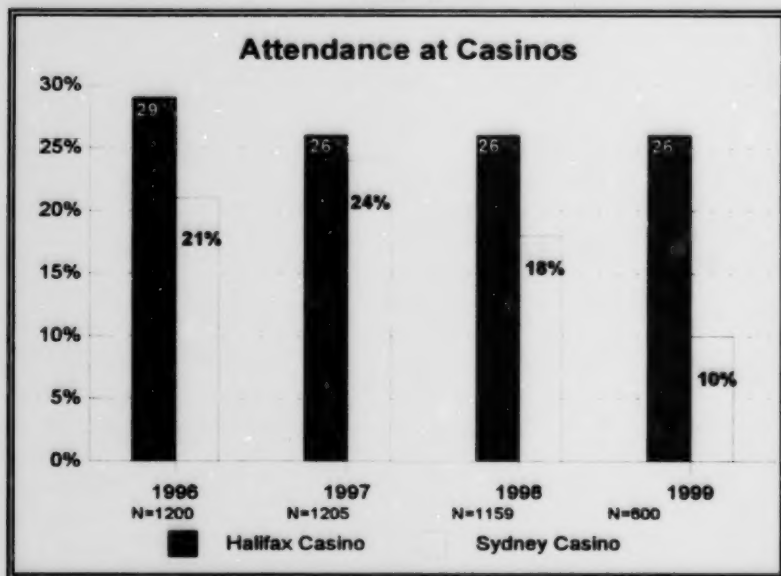
Per purchase expenditures on these tickets remains unchanged from 1998 with the mean expenditure on on-line tickets at \$3 and a median expenditure of \$2. Fifty-seven per cent of the sample stated they had played instant tickets, however, they did not purchase these tickets as frequently as on-line tickets. The mean and median expenditure on instant tickets, per purchase, was \$3 and \$1. Nineteen per cent of the sample

reported playing breakopen tickets, with a mean and median expenditure of \$2. While 6 per cent of the sample reported engaging in Pro-Line (an on-line sports lottery), the mean and median expenditures were higher at \$6 and \$5 respectively. This suggests that Pro-Line sports lottery players are wagering higher amounts of money than on other lottery tickets.

## Casinos

The reported attendance at the Nova Scotia casinos has declined from between 38 per cent and 40 per cent in the previous three years to 33 per cent in 1999.<sup>4</sup>

### Item 3.3



*Although not statistically significant*, play at slot machines appears to have returned to near 1997 levels (from 25 per cent in 1998 to 30 per cent in 1999). Participation at table games in 1999 seems constant at ~6 per cent to 9 per cent over the past four years.<sup>5</sup> Attendance at the Halifax casino also remains unchanged in 1999, at 26 per cent, whereas 10 per cent of the

respondents had played casino games at the Sydney casino in 1999, down from 18 per cent in 1998.<sup>6</sup>

The majority of casino players continue to come from among adults living in or near the Halifax and Cape Breton regional municipalities (approximately 44 per cent in HRM and CBRM versus 25 per cent rural). Age and income were, once again, associated with casino gaming. As age within the sample increased, the likelihood of playing casino games decreased. Also, increased levels of income is positively correlated with participation at the casinos.

The frequency of attendance at casinos in 1999 was low. Among those reporting playing casino games at the Halifax casino, 97 per cent had done so less than once per month, compared with 90 per cent of respondents who had participated at the Sydney casino at the same rate. Weekly play also seems to have declined from approximately 5 per cent across both locations to less than 1 per cent.

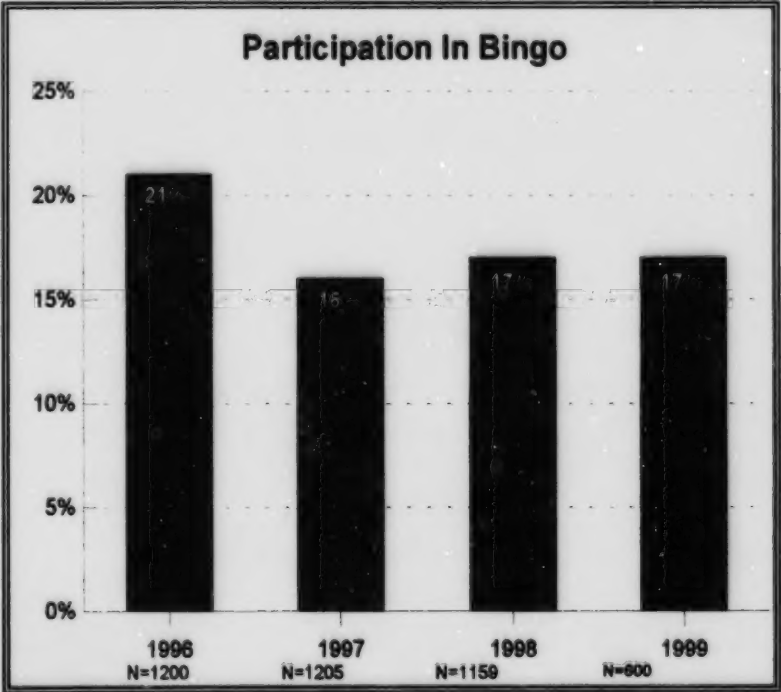
Mean duration of play per visit to the Halifax casino was 63 minutes for slots and 69 minutes for table games. The mean expenditure per visit for slots at the Halifax casino was \$35, with a median of \$20, and a range of \$1 to \$400. Per visit expenditures on table games at the Halifax casino averaged \$59, with a median of \$28 and a range of \$5 to \$600. The bottom 25 per cent of respondents who played slots or table games at the Halifax casino spent between \$10 and \$20 per visit, while the top 10 per cent expended \$75 to \$600.

Mean duration of play on slots per visit at the Sydney casino was 53 minutes, and table games garnered a mean time of 45 minutes. Slots at the Sydney casino had a mean expenditure of \$29, a median value of \$20, and a range of \$2 to \$450 per visit. Table games may be garnering higher overall expenditures from the Sydney casino, with a mean of \$77, a median of \$40, and a range of \$20 to \$200 per visit. The bottom 25 per cent of respondents who played slots or table games at the Sydney casino reported spending between \$10 and \$20 per visit, while the top 10 per cent expended \$40 to \$450.

# Bingo

As shown in Item 3.4, reported participation in bingo has remained stable since 1997. Seventeen per cent of the sample reported playing bingo in 1999, consistent with 1997 and 1998 figures.

Item 3.4



In 1999, 68 per cent of the bingo players did so in bingo halls, 17 per cent played television bingo, and 14 per cent played both forms. As previously noted by the Authority, bingo is engaged in quite regularly. Nearly one-quarter of the bingo players in the 1999 survey had played in the previous month, and 14 per cent reported weekly play. Bingo was found inversely related to levels of income, with those in the lowest income brackets more predisposed to participate. Women were approximately five times more



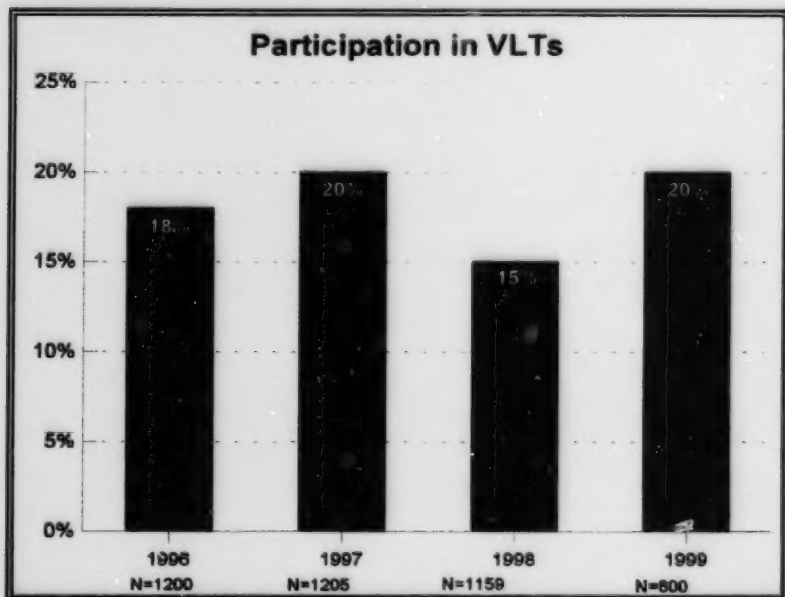
likely than men to report playing bingo (24 per cent versus 5 per cent), and adults under 35 years of age comprise just over half of those who played bingo in the last year (55 per cent). Focal Research observes, “despite the popular misconception that bingo is largely played by older adults, in terms of play over the last year, the opposite is true in Nova Scotia.” Moreover, regular play was found to be similar across age categories.

The mean duration for play at bingo was 128 minutes. The mean expenditure per visit was \$23, with a median of \$20, and a range of \$3 to \$60. The bottom 25 per cent of bingo players spent between \$3 and \$15, while the top 10 per cent of players played \$35 to \$60 per visit.

### Video Lottery

Video gaming activity has remained relatively constant during the past four years, with roughly 15 per cent to 20 per cent of the samples reporting annual VLT play. While participation rates for video lottery terminals are among the lowest for gaming activities in the province, they continue to account for the largest proportion of wagers in the province.

#### Item 3.5



In 1999, participation on VLTs was similar to that of bingo, followed by casino table games (9 per cent), horse betting (3 per cent), and Internet gaming (< 1 per cent). Nevertheless, weekly play of VLTs was second only to instant and On-line lottery tickets, and expenditures on these tickets are much lower.

Male respondents and those under thirty-five years of age comprise the majority of VLT players in the sample. Per visit duration of play was 38 minutes. The mean expenditure per visit was \$17, with a median of \$5, and a range of \$1 to \$150. Roughly three-quarters of the respondents who had played video lottery in the previous year spent \$10 or less per session. The top 10 per cent of players spent between \$50 and \$150 per visit.

### **Reported Participation By Children**

The 1999 survey asked all respondents who indicated they had children whether, to the best of their knowledge, any of their children had participated in lotteries, bingo, cards for money, or other gambling activities. Eleven per cent of the sample reported having a child in their household who had participated in some form of gambling. Participation in lotteries and bingo were cited most frequently at 6 per cent and 5 per cent respectively, and 2 per cent stated their children had played cards for money or some other form of gambling. The researchers from Focal Research estimate that one-quarter of the Nova Scotian' households with children are aware of participation by a child in lotteries or bingo.

### **Participation Summary**

Rates of participation in gaming activities have remained stable since 1996. Still, attendance at the Sydney casino may be waning, and both casinos may be experiencing declines in weekly participation. A decline in participation in raffle tickets noted in 1998 was found again in 1999. This suggests that participation in raffles has dropped. However, *wagers* across gaming activities have increased. Thus, while fewer people may be engaging in some activities like raffles, those who do, are placing higher wagers overall.

As noted in previous years, the duration of play varies by activity. Mean averages for sessional play at the casinos were between 45 minutes and 69 minutes, while bingo players engage in that activity for approximately 128 minutes, and video lottery players spent 38 minutes on average. However, the reader is cautioned that the frequency of sessions and amount wagered per session, not time spent, determined the overall wager for each activity.

The reported participation of children in lotteries and bingo is supported by prevalence studies and a focus group study conducted by researchers from the Alcohol and Gaming Authority. The results imply that lottery tickets and bingo have a high level of overall social acceptance compared with other gaming activities.

## **ATTITUDES AND AWARENESS OF GAMING**

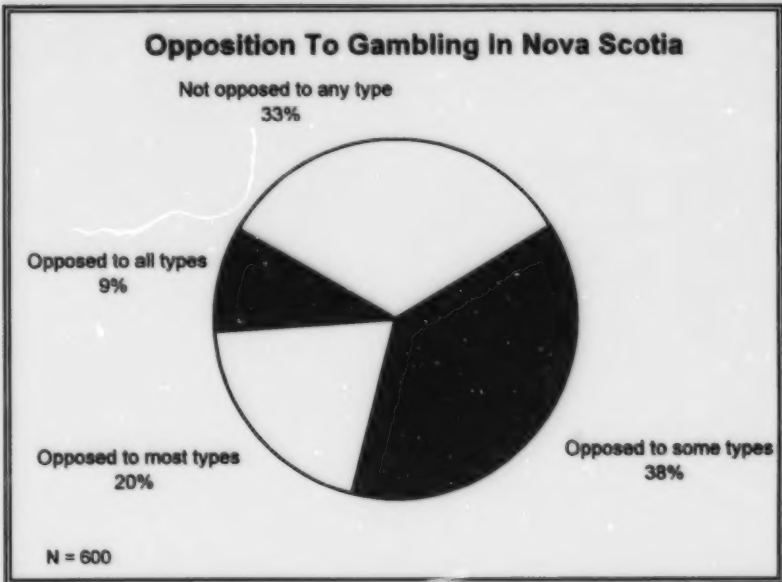
Focal Research designed the survey questionnaire, in conjunction with Authority researchers, to elicit opinions regarding gaming and determine awareness of gaming related issues in the province. The following sections present the survey responses regarding:

- ▶ opposition to gaming and levels of approval for different gaming activities;
- ▶ particular issues related to specific gaming activities;
- ▶ awareness of, and attitudes toward programs, and services designed to mitigate problem gambling, or assist problem gamblers;
- ▶ and, desired information about various aspects involving gaming in the province.

### **Levels Of Opposition Toward Gambling**

Since 1996, Nova Scotians have displayed mixed opposition to gambling. Twenty-nine per cent of the respondents in the 1999 survey reported being opposed to all or most types of gambling, compared with 37 per cent opposed to some types, and 32 per cent not opposed to any forms of gambling.

### Item 3.6



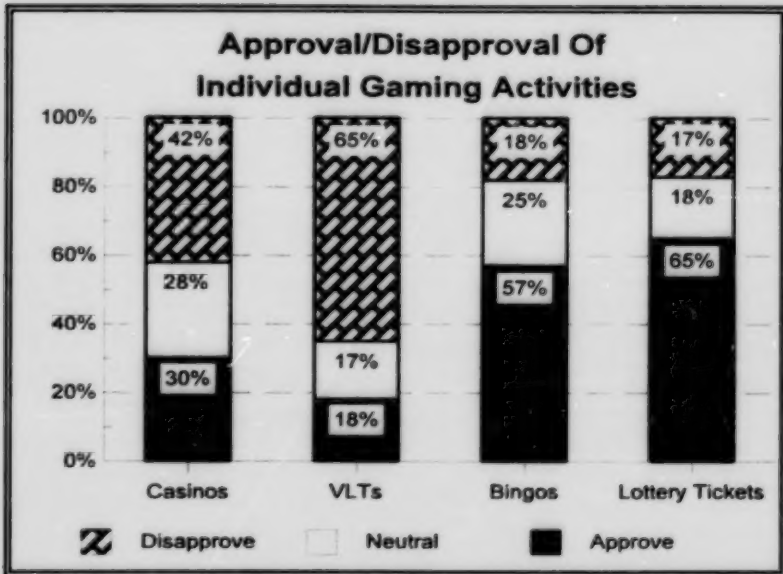
Still, opposition to gambling appears to be growing. In the 1997 survey, 38 per cent showed no opposition to any form of gambling, but this declined to 31 per cent in 1998, and has remained static in the 1999 survey results. Moreover, the trend has shifted towards opposition to most types of gambling, up to 20 per cent in 1999, from 12 per cent in 1997.

Opposition to gambling remains unchanged by region of the province. The 1999 survey also found that age is associated with opposition to gambling. More than other age groups, respondents above 55 years of age oppose some or all types of gambling in the province.

#### **Approval/disapproval Of Gaming By Activity**

There appears to have been a decline in approval for the provincial casinos, to 30 per cent in 1999, from 40 per cent in 1998.<sup>7</sup> Disapproval also

### Item 3.7



dropped to 43 per cent in 1999, from 48 per cent in 1998. Twenty-eight per cent stated they were neutral, which is approximately a 14 per cent increase from 1997 and 1998. Approval for casinos is highest in Halifax County at 35 per cent (down from 47 per cent in 1998). Approval for casinos is now similar in Cape Breton County and the remainder of the province at 26 per cent respectively (down from 38 per cent and 35 per cent in 1998).<sup>8</sup> Men are still most likely to approve of casinos, and disapproval increases with age.

VLTs continue to garner the highest disapproval among Nova Scotians of any gaming activity. Sixty-six per cent of survey respondents disapproved of VLTs in 1999, unchanged from the previous year. Approval levels have also remained relatively constant since 1996, at approximately 18 per cent to 22 per cent. Acceptance of VLTs is still highest among men (23 per cent

men versus 12 per cent women), and those under the age of 54 ( $\approx$ 20 per cent versus 9 per cent).

Disapproval of bingo has remained constant since 1996 at roughly 18 per cent. Still, approval levels appear to be shifting slightly to neutral. Approval rates have declined to 57 per cent this year from 61 per cent in 1997.<sup>9</sup> Conversely, since 1997, the percentage of people who are neutral toward bingo has increased to 25 per cent from 21 per cent. Age was negatively associated with approval for bingo. Additionally, a majority of those who approve of bingo have never played the game. Focal Research observes that, "this underscores bingo's 'social acceptance' throughout the province."

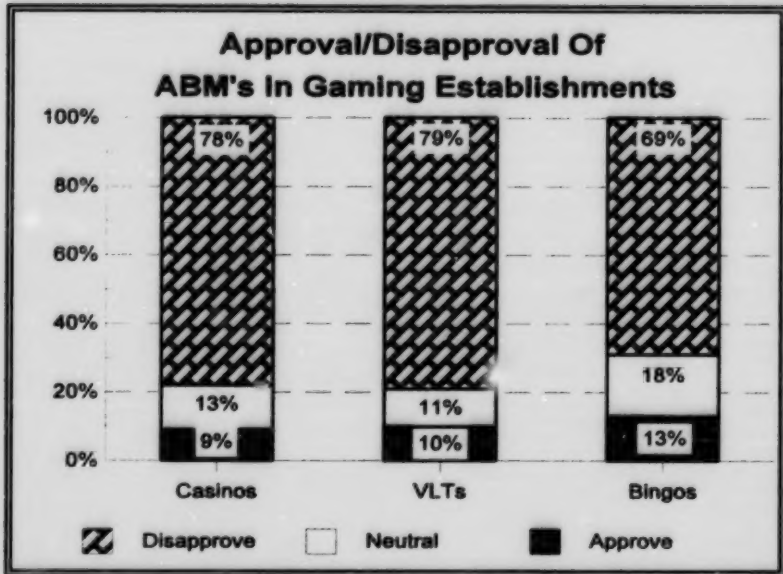
Approval for lottery tickets appears to have decreased in the past year, to 65 per cent from 69 per cent. The apparent shift is to the neutral category, which increased by 4 per cent. Opposition to lottery tickets has remained fairly stable since 1996, at between 16 per cent and 18 per cent. Halifax county respondents are more inclined to approve of lotteries than the remainder of the province, men approve more often than women, and as age increases, approval for lotteries decreases.

### **Issues Related to Specific Gaming Activities**

The survey inquired into the respondents' opinions about specific issues related to gaming in the province. These include views concerning automated banking machines where gambling is present, bill acceptors on VLTs, a player tracking mechanism for VLTs, awareness of the voluntary exclusion process in Nova Scotia casinos, and approval of voluntary exclusion options for other gaming activities.

The survey asked respondents for their level of approval about the availability of automated bank machines (ABMs) in provincial gaming establishments, such as casinos, VLT sites, and bingo halls. As shown in Item 3.8, while variation exists by activity, opposition to ABMs in gaming establishments is strong. Seventy-eight per cent and 79 per cent of respondents disapproved of the availability of automated banking in casinos and VLT sites respectively, and 69 per cent did not approve of ABMs at bingos. No differences were observed by participation in gambling.

### Item 3.8



Respondents from the Halifax region were least opposed and those from the Cape Breton region most opposed to ABMs in gaming establishments. Women were also more inclined to disapprove than men ( $\approx 83$  per cent versus  $\approx 72$  per cent). While approval is similar between men and women for casino and video gaming, women are also less likely to approve of ABMs in bingos than men. As with opposition to gaming overall, approval significantly declines as age increases.

At present, video lottery machines in Nova Scotia do not have the capability to accept currency in bills. While some other jurisdictions have video lottery machines with "bill validators," the findings suggest this is not something a majority of Nova Scotians would like to see introduced in the province. Sixty-two per cent of respondents disapproved of having VLTs accept both bills and coins rather than just coins, while 13 per cent approved. Disapproval of bill validators is associated with gender and age.

Fifty-six per cent of men disapproved versus 69 per cent of women. Respondents above the age of 55 are also more likely to disapprove. VLT players were equally split on the issue, with 33 per cent of those who play VLTs approving, and 35 per cent disapproving of bill validators.

In January 1999, the Authority found support for a VLT player tracking process among two focus groups of self-reported problem VLT players. Through on-line tracking, video lottery terminals could give players information about their own play habits, and aggregate tracking of play would provide a wealth of information for policy makers and health providers. The Focal Research survey asked respondents to indicate their level of approval for a "swipe" card that would be mandatory for VLT play. Fifty per cent approved of the idea, while 29 per cent were opposed, and 20 per cent were neutral. Respondents above 55 years of age were more neutral to the idea than those below this age category. Those respondents who had played VLTs in the past were equally likely to approve of the idea, but they were more likely to disapprove (42 per cent of players disapproved versus 28 per cent of non-players). Given the relatively high level of approval from some players, further examination could identify concerns other players may have.

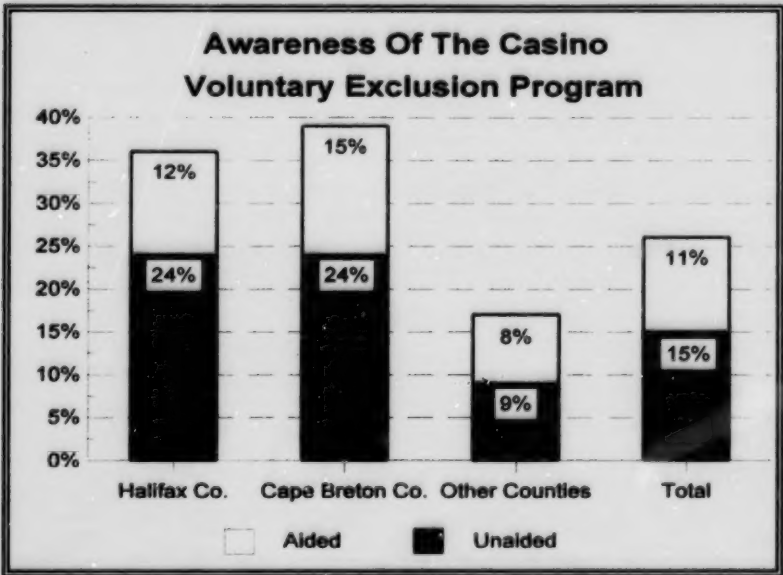
Both casinos in Nova Scotia operate a voluntary exclusion program. The program allows people to formally seek assistance to ensure they do not enter a casino. When casino staff identifies a person who has excluded themselves, they immediately escort the person from the premises. The survey measured both unaided and aided awareness of the voluntary exclusion program at the casinos.

As shown in Item 3.9, 15 per cent of the respondents were aware, without prompting, of the voluntary exclusion program at the two casinos. However, 13 per cent of the sample were aware and at least somewhat knowledgeable of the program. Top of mind awareness was highest among respondents in Halifax and Cape Breton counties, and also among people with higher than average annual incomes. The survey prompted the respondents who could not recall the program with a brief description. This increased the level of awareness by 11 per cent overall. In total, 26 per cent of the respondents were aware of the program. No statistically significant differences exist by participation in casino gaming. These



findings suggest a need for increased communications about the voluntary exclusion program at the casinos.

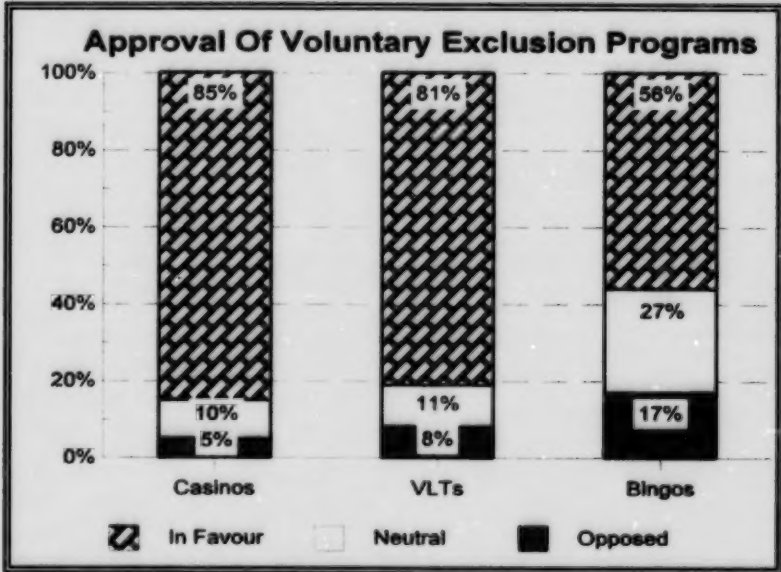
Item 3.9



The survey also measured levels of approval for voluntary exclusion programs for casinos, video lotteries, and bingo.

A majority of the sample reported being in favour of voluntary exclusion programs for all three gaming options (Item 3.10). Still, approval for voluntary exclusion programs for bingo was less than for casino and VLT sites. No differences were found by participation in the three activities or levels of awareness of the voluntary exclusion programs already in existence. Respondents above 55 years of age are most likely to be neutral and less likely to favour voluntary exclusion programs for bingo. Level of income also specified the results in that respondents who reported higher than average annual incomes were more favourable than those with lower annual incomes.

### Item 3.10



Examined together, the overall findings from this section suggest that Nova Scotians want mechanisms in place that assist people to control their gambling. This includes controls on automated banking machines where gaming is taking place, and restricting bill acceptors on video lottery machines. Additionally, moderate to strong support for a VLT player tracking device and voluntary exclusion programs exists. However, awareness of the present voluntary exclusion programs is modest, and communications informing players is warranted.

### Interest And Knowledge Of Specific Gaming Issues

All of the respondents were questioned about their perceived level of knowledge, and level of interest, in specific gaming related issues. Overall, low to moderate levels of perceived knowledge was observed. Generally, the respondents thought of themselves as more knowledgeable in areas of responsible gambling and problem gambling than with impacts of gambling

on youth and seniors, and how games of chance are operated. Twenty-three per cent felt they were “very” knowledgeable about how to gamble responsibly, and between 44 per cent and 50 per cent were “somewhat” knowledgeable about early warning signs of problem gambling, services available for problem gamblers, and the impact of problem gambling in Nova Scotia. Fifty-nine per cent to 70 per cent of the sample did not feel at all knowledgeable about the odds of winning games of chance or the way the games are operated, the amount of money generated by gambling, and the impact of gambling on youths and seniors.

Examining levels of interest in gaming related issues, it was determined that more than half of the respondents were very interested in the amount of money generated by gambling (55 per cent) and how it is used (80 per cent), and the impact of gambling on children (56 per cent). Forty-three per cent of the sample was also very interested in the impact of gambling on seniors.

### **Issues Generally Related To Gaming**

The survey asked each respondent for their level of agreement with nineteen attitudinal statements, and the researchers at Focal Research identified five separate categories: problem gambling education, information, and assistance; benefits from gambling; restricted access and advertising; gambling as a high risk behaviour; and, ‘other.’

The respondents endorsed easy access to support services for people experiencing problems with their gambling (90 per cent), and felt that the government should provide programs and services (80 per cent). They also felt that people generally need more information about how to manage their gambling (83 per cent), but fewer felt the government should be offering this type of service (68 per cent). Fourteen per cent considered that too much attention was given to problem gambling, and 14 per cent were neutral on this issue.

A significant proportion of the respondents felt that gaming generally provides benefits to the province. Specifically, 62 per cent considered games of chance as a good way for charities to raise money, and 54 per cent thought of gaming as a good way for government to generate revenue.

About one-third (32 per cent) of the sample do not seem to think of gambling as a form of entertainment, while 48 per cent agreed that gambling is fun and entertaining, and 19 per cent were neutral. Also, 62 per cent of respondents also did not feel games of chance offer people a reasonable chance to win.

Regarding advertising and restrictions, respondents agreed: that there should be restrictions on gambling advertising similar to those imposed on tobacco and alcohol (76 per cent); that gambling advertising encourages youth to gamble, and people to gamble too much (61 per cent); and, that too much advertising and promotion for gambling are present in Nova Scotia (48 per cent). Additionally, 70 per cent felt that gambling takes advantage of those who can least afford to play, and 55 per cent agreed they would prefer to see VLTs reduced in number or removed from the province, even if it meant increases in their personal taxes. Among the 55 per cent who preferred to have VLTs removed, 49 per cent (27 per cent of the sample) thought if VLTs were banned the players would spend their monies on other gambling activities.

Looking at gambling as "high-risk" behaviour, 86 per cent of the respondents agreed that "everyone who gambles, will, on occasion, spend more money than they intended to." Forty-two per cent disagreed with the statement that, "the majority of people who gamble do not have any problems with their gambling."

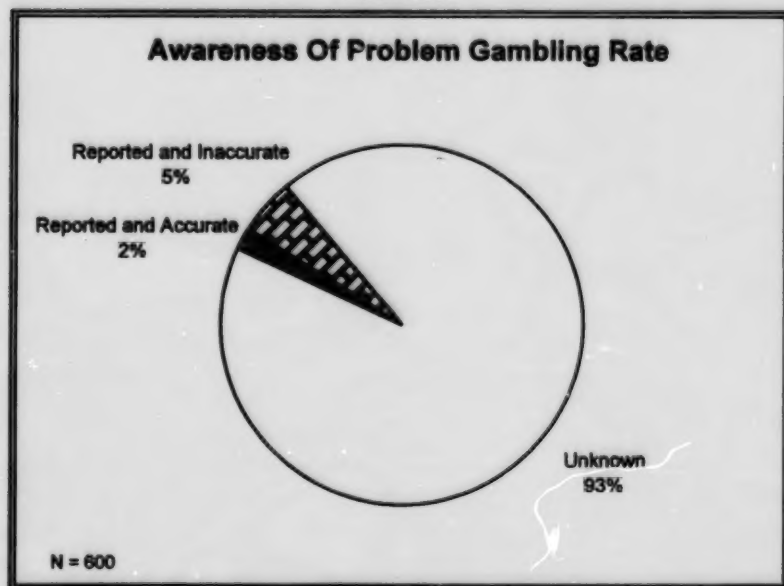
Lastly, 65 per cent of the sample agreed they had enough information about problem gambling to tell if someone in their household developed a problem with their gambling. Nevertheless, 30 per cent of those who agreed (20 per cent of the sample) stated that they were not at all knowledgeable about the early warning signs of problem gambling.

### **Awareness Of Problem Gambling**

The last prevalence study carried out in Nova Scotia (Baseline Market Research, 1996) provided an estimate of 3.9 per cent 'current' (in the previous year) *problem and possible pathological gamblers* among adults of Nova Scotia. In the AGA's 1998 annual report, Sterling Research reported that 81 per cent of the respondents in a province-wide survey did

not know the rate of problem gambling. Moreover, just 5 per cent thought the rate was between 1 per cent and 5 per cent. The Focal Research survey also asked respondents whether they were knowledgeable about the rate of problem gamblers in the province.<sup>10</sup>

### Item 3.11



In 1999, 93 per cent of the sample reported they did not know, and only 2 per cent gave a top of mind response of between 1 per cent and 5 per cent. After probing those who could not provide an answer unaided, 12 per cent of the respondents ventured an answer that was within the provincial estimates, bringing the total to 17 per cent. Approximately 50 per cent of the sample did not know, but surmised the problem gambling rate was above 20 per cent. Differences in awareness were found by demographics. Respondents from Halifax County, men, and those with higher incomes are more likely to provide lower estimates of problem gambling, and significantly more likely to cite rates of 5 per cent or less. It is not known why a disparity exists in the perceived rates of problem gamblers; however,

the general population is clearly unaware and unknowledgeable of the *estimated* prevalence of problem gamblers in Nova Scotia.

The respondents were asked whether they personally knew of anyone who has, or has had, a problem with their gambling in Nova Scotia, and 49 per cent responded affirmatively. Five per cent indicated it was a family member in the household, similar to the 6 per cent found in 1998. Nine per cent stated it was a family member outside the household, and 43 per cent claimed to know someone with a gambling problem who was not a family member and did not live in their household. It should be noted that the survey was not a prevalence study, and it is not known what constitutes a problem for the respondents.<sup>11</sup> Thus, the figures are the perceived rates of of problem gamblers as defined by the participants.

Those participants who felt they knew of a problem gambler were asked to describe the gambling activities of that gambler. Eighty-one per cent indicated video lottery gaming was a source of problems, with 21 per cent stating slot machines. Bingo, instant lottery tickets, casino table games, and card games outside of a casino were associated with problem gambling to a much lesser extent. Still, caution is warranted in interpreting these results. The perceived problems with video lottery gaming correspond well with prevalence and treatment statistics. However, instant and on-line lottery tickets are also moderately associated with the prevalence of problem gambling (Baseline Market Research, 1996) in Nova Scotia, and are the second most frequently mentioned activities among people who seek treatment for gambling problems through the Department of Health (NSAGA, 1997).

Demographic differences in perceptions of problem gambling were found by region and age. Respondents living outside of Halifax and Cape Breton counties were significantly more likely to report knowing a problem gambler. This is plausible since smaller communities are typically more socially integrated, and people are often more aware of what is happening in their communities. Respondents from Cape Breton County reported slot machines as problematic twice as often as those in Halifax County, where the other casino can be found. Cape Breton County respondents were also less inclined to mention VLTs, and more likely to report card games outside of a casino as a source of problem gambling. The survey also

found that people under the age of 35 reported knowing a problem gambler twice more frequently than other age groups. This fits with prevalence data that shows almost half of the people designated as having a problem with their gambling are between 18 and 34 years of age (Baseline Market Research, 1996). However, video lotteries were mentioned most often by these respondents as the source of the problem, yet a profile of problem VLT players found few significant differences by age (Focal Research Consultants, 1998).

In sum, a substantial proportion of the public does not appear knowledgeable of the *estimated* rates of problem gambling in Nova Scotia. In fact, a majority of those surveyed felt the rate of problem gamblers was above 20 per cent. This perception may be correct *depending on what people define as problematic gambling behaviour*. Still, it is improbable that 20 per cent of the population fall within the clinically accepted definition. Therefore, assessing impacts using perceptions from the population is difficult.

### **Awareness And Use Of Problem Gambling Services**

Awareness of assistance for problem gamblers appears to be increasing, from 52 per cent in 1998, to 58 per cent in 1999. However, only 40 per cent are aware and knowledgeable of services. Furthermore, 49 per cent of those who reported knowing a problem gambler were aware of services in place, and the number increases to 60 per cent among those who claimed to have a problem gambler in the household. Younger respondents (19 - 34) were most likely to know of specific services.

Among those aware of assistance for problem gambling, the most frequently cited sources of assistance included: "Gamblers Anonymous" (72 per cent), "Problem Gambling Help Line," (23 per cent), "Drug Dependency Services" (7 per cent), and "other" resources (4 per cent).<sup>12</sup>



## **PROBLEM GAMBLING HELP DIRECTORY**

In its 1997/98 Annual Report, the Authority recommended that a reference booklet be compiled that would contain a provincial listing of all government front-line service providers, clinical agencies, organizations and help groups, and other qualified individuals known to offer information or professional assistance concerning problem gambling.

In 1999, Authority staff engaged in development of a gambling addiction *Help Directory*. Through the use of the *1998 Directory of Addictions Services in Nova Scotia* and the *1999 Directory of Self-Help Groups in Nova Scotia*, the Authority identified potential problem gambling treatment, counselling and referral services. An information request was sent out in early August asking each agency and individual to provide the Authority with information pertaining to their objectives, activities, hours of operation, location, and contact information (e.g., phone, fax number and so forth.). Each was also asked to supply the Authority with the names of other contacts they were aware of.

The Authority experienced difficulties in identifying and collecting information on some problem gambling services. A few individuals and agencies do not dedicate their efforts solely to gambling-related problems. Others provide awareness programs or other support services, but did not think these should be associated with treatment. These varied levels of services made it difficult to decide who should be included in the listings. In addition, it was challenging to decide site-specific as opposed to program-specific information for some service providers. Despite these limitations, the Authority has made every effort to make the directory as complete and accurate as possible.

As of November 1999, 52 service providers had been identified as providing problem gambling treatment, counselling, or referral services in Nova Scotia. Information on these 52 service providers has been organized in a pocket size booklet that divides the province into four regions. Each region is represented in a chart that lists the providers and services they offer. The government-sponsored, toll free, Problem Gambling Help Line is also displayed.



It is anticipated that the directory will be distributed to the following: organizations and individuals included in the Help Directory, Help Line callers, front-line service providers, correctional facilities, religious organizations, municipalities, medical clinics, drop-in centres, self-help groups, Atlantic Lottery Corporation kiosks, MLA constituency offices, school boards, public libraries, the justice system, drug and alcohol abuse centres, policing authorities, and registered addiction centres. It is also envisioned that the directory will be available to VLT licensees and casinos through the new Responsible Gaming Program. The *Help Directory* will be published and distributed by the Authority free of charge to recipients. At present, the *Help Directory* is in the final production stages.

## **PROBLEM GAMBLING COUNSELLOR CRITERIA**

Within the province of Nova Scotia there is no set criteria used for certifying problem gambling counsellors. However, as identified by the Department of Health all Addiction Service and Problem Gambling Help Line employees operate under a set of guiding principles. These principles include the following:

- ▶ Clients have the right to self-determination, autonomy, privacy and equality, and the expectation of confidentiality. They have equal access to quality services and are not discriminated against based upon race, ethnicity, religion, marital status, gender, sexual orientation, age, abilities, economic status, or political affiliation.
- ▶ A biopsychosocial model of service delivery is employed based upon a holistic, client-centred community-based approach.
- ▶ Staff adhere to the Nova Scotia Addiction Services Code of Ethics and believe in the intrinsic worth and dignity of all persons.
- ▶ Community partnerships incorporating a community development approach in collaboration with key stakeholders are the cornerstones of service delivery.

Although Nova Scotia does not have a set criteria for certifying problem gambling counsellors, any resident of Canada who wishes to receive certification as a Canadian problem gambling counsellor can do so by meeting the Standards Criteria set by the Canadian Problem Gambling Certification Board. In order to receive certification an applicant must complete a total of 3,500 counselling hours, a minimum of 800 supervised evaluated hours, and 150 hours of approved gambling specific education (as defined by a core curriculum) within 5 years prior to application. All applicants are expected to abide by the Certified Gambling Counsellor's Code of Ethics. Every two years after certification counsellors must be re-certified by providing evidence of 32 hours of approved continuing education. More information on the Standards Criteria can be obtained from the Canadian problem gambling counsellor information and application report.

The American Academy of Health Care Providers in the Addictive Disorders has announced the development of a certification examination for Certified Addictions Specialists (CAS) who specialize in the treatment of gambling related problems. To obtain certification, applicants are required to receive a passing grade on a gambling specialist certification examination. As well, they are required to have a masters degree from an accredited health care training program and three years of clinical experience providing treatment to individuals with gambling problems. Individuals who have other degrees or no degree are required to have five years of clinical experience.

There is some debate whether Nova Scotia should develop a standard set of criteria for certification of problem gambling counsellors. Having a certification process could help ensure that individuals seeking problem gambling assistance will have access to skilled, knowledgeable and competent professionals. There is also a concern, however, that professionalizing the counselling requirement for problem gambling counsellors may reduce the number of problem gambling treatment, counselling, and referral services in the province. Some advocates may argue that the value of shared experience with an unqualified counsellor may have comparable benefits to treatment from a trained professional.

## **STAKEHOLDER INTERVIEWS**

In 1998, the Authority reported on a Tri-County examination of the service agencies and organizations that interface with problem gamblers in Richmond, Pictou, and Lunenburg counties. It was concluded that although a wide assortment of agencies had contact with problem gamblers, little information was being collected. It was also suggested that the observations could be extended to other organizations in the remainder of the province.

As follow up to the Tri-County study, the Authority conducted stakeholder interviews with problem gambling service providers in Nova Scotia to identify how problem gamblers are served, as well as to develop a better understanding of how to assist problem gamblers at the community level. Authority staff conducted 14 telephone interviews with individuals and organizations that provide treatment, counselling, or referral services to problem gamblers and their friends and family.<sup>13</sup> Each interview took approximately one hour to conduct and provided in-depth information about screening and intake criteria, treatment and information offered, referral services, follow-up procedures, problem gambling indicators, common gambling problems, and perceptions of the Voluntary Exclusion Program at Nova Scotia Casinos. The respondents were also asked to assess their treatment program and to identify potential areas of improvement.

The Authority encountered constraints when identifying organizations and individuals for the interviews. A few organizations (specifically, those associated with the Regional Health Boards) were interconnected. To eliminate duplicate reporting, only the main organization associated with each Regional Health Board was contacted for an interview. The Authority also experienced problems when attempting to identify and contact individuals who independently provide assistance to problem gamblers. Some were reluctant to give details about their organization or refused an interview. It is felt that they did not want to appear as though they provide, or have the qualifications to provide, treatment and counselling services. However, the assistance these people can provide to problem gamblers should not be underestimated. While they do not have clinical training or qualifications to provide treatment, they do have first-

hand knowledge and experiences that can be an important front-line tool in getting other problem gamblers to treatment providers.

The findings from the interviews are presented below. To maintain confidentiality, individual comments are not cited. A copy of the questionnaire can be found in Appendix B. It is important to note that the findings are qualitative in nature, and as such cannot be used to generalize to the population of service providers. In addition, the statistics related to the intake of problem gamblers cannot be generalized to the population of problem gamblers in the province.

## **FINDINGS**

As shown in the Tri-County Pilot Project in 1998, problem gamblers seek or obtain assistance through a variety of means. The most common is self-referral, followed closely by referrals from family or friends. Other methods of referral were through addictions counsellors, mental health professionals, supervisors and employers, policing agencies, the Problem Gambling Help Line, and other gamblers. The interviewees reported that the bulk of the problem gamblers had sought help in the "desperation stage" of gambling, several were in the "middle chasing stage," and very few had sought assistance in the "winning stage."

The 14 service providers reported contact with a median of 44 clients per month (ranging from 272 to 1 client). However, among the reported monthly contacts, approximately 40 per cent were considered continuous monthly clients.

A wide assortment of screening methods is used when determining the nature and extent of an individual's gambling problem. One service provider uses the South Oaks Gambling Screen (SOGS), and one uses the DSM-IV criteria. Two interviewees employ a combination of the SOGS, the DSM-IV criteria, along with a gambling assessment screen, or substance abuse screening inventory. Two did not use any screening instruments, and the remaining eight use a variety of screens or questionnaires.

The Authority has observed from Department of Health, Drug Dependency Services statistics (1995 to 1999), that people in treatment for problem gambling report engaging in a wide variety of gambling activities before seeking treatment. This was also found in the interviews with service providers. VLTs were mentioned by 13 of 14 of the respondents as an activity problem gamblers who sought treatment were involved with. Instant tickets were reported by eight of the respondents, casino games and bingo were specified by five service providers, and a few mentioned problem gamblers who were gambling at on-line lotteries, sports betting, race tracks, stock markets, and card games outside of a casino. Additionally, four respondents felt that Internet gambling is becoming more of an issue, despite the fact that they did not report any problem gambler's involvement with it.

The service providers noted in their interviews that co-morbidity in the form of alcohol and/or drug abuse is prevalent among people seeking treatment for gambling problems. Family breakdowns and mental health issues such as depression, psychiatric disorders, past histories of sexual and/or physical abuse, and low self-esteem were also found among problem gamblers by 10 service providers. Nevertheless, it is important to note that while these conditions may lead to, or exacerbate, gambling problems, we do not know the degree of prevalence of each.

Other significant problems observed among problem gamblers were fear, helplessness and panic, thoughts of suicide, financial crises, family violence, and self-destructive behaviour. Again, we do not know the proportion of problem gamblers who report these problems to the service providers.

Turning to the programs offered, a majority of the service providers (n=10) provide counselling and referrals for additional assistance. Three of the 14 strictly make referrals and one could not recall how many clients they typically counsel. Among the remaining 10, the median number of reported clients counselled was 11 with a range of 3 to 250. Approximately 70% of those who receive counselling are male, and 30% are female. Additionally, nine of the service providers most frequently counsel the gambler, while one provides counselling for friends and family, and three organizations give counselling to both. Nine of the organizations

maintain contact with the client after counselling or treatment. Each organization appears to have different policies for follow-up, and the duration of contact ranges from a few weeks to a year.

Programs for problem gamblers also varied across service providers. A few provide literature, videos, and lectures in conjunction with more formal counselling. Three of the organizations coordinate self-help and support groups, including Gamblers Anonymous (1) and a Step Program (1). Six offer individual counselling, four provide group counselling, and three have family counselling programs. Other organizations offer education, financial planning, detox services, and crisis intervention.

While numerous organizations were mentioned for referrals, Gamblers Anonymous, Department of Health Drug Dependency Services, and Community and Support Services are the three organizations that service providers refer their clients to most often. The rationale for choosing a specific organization for referral also appears to vary by organization. Some of the reasons for choosing an organization for referral are: therapists, follow-up programs, self-help groups and community contacts, and familiarity with the program.

Ten of the 14 respondents indicated they keep records of problem gamblers they counsel or refer to other agencies. However, the information that is gathered is not consistent across organizations. For instance, seven gathered demographic information, four kept records on other addictions, and one maintained records of previous contacts or treatment.

When asked how effective they felt their treatment program was, one of the fourteen reported their program was "not very effective." Five felt their program was "very effective" to "extremely effective." Three indicated it was working "well," one stated it was a "positive" experience, and four could not rate their programs.

Nevertheless, there does not appear to be any standard criteria for rating the success of programs for assisting problem gamblers. One service provider who rated their program as "extremely successful" stated the reasons it was successful was that, "it removed gamblers from the gambling environment, helped to break the cycle, and intervened in the right areas." Another rated

their program as "very good" solely on an increased number of clients. Just one service provider rated themselves against objective "standards," which were not provided, but felt their program was "good." Additionally, not one of the service providers was able to report on relapses suffered by their clients. Ten of the 14 apparently rely on the clients, family, or friends to signal when a relapse occurs. Three service providers reported determining relapses through follow-up procedures. Most expected relapses to occur, and one mentioned that a relapse is part of the ongoing treatment process.

The service providers also offered suggestions about provisions to improve their programs. Six of the fourteen thought of increased funding, four require more staff, three felt that heightened public awareness would be beneficial, and three suggested the creation of more self-help groups.

Each interview also probed the respondent's awareness and opinions regarding voluntary exclusion programs. Eleven of the 14 service providers stated they were aware of the voluntary exclusion program at the Nova Scotia casinos. Ten of the respondents had positive opinions about the voluntary exclusion program, such as "good program," "good idea," "a self-help tool," and "increases awareness." One respondent felt that it, "turns into a game to get back in," and one suggested it was only useful for some of their clients. Suggestions to improve the voluntary exclusion program included increased security and monitoring mechanisms, which include limiting the time frame of exclusion and providing updating procedures for excluded individuals over a specific time period. Other suggestions made by several respondents was increased publicity and education about the program, enabling counsellor access to the participants, and creating a support network for excluded individuals.

Nine of 14 service providers were in favour of adoption of a voluntary exclusion program among VLT siteholders. One was not in favour of the concept, and three were unsure. Reasons given for adoption of such a program were that, "most individuals have favourite places," "it may help to break the cycle," "bar owners know the individuals who have problems," and "there should be a way to keep individuals with problems out." Difficulties with the concept included problems with monitoring and a need for some type of tracking device, that it may lead to social isolation of



people in small communities, and that people should have the right to choose.

Eight of the service providers considered a voluntary exclusion program for bingo a good idea, however, the rationale was different from that given for VLTs. Most of the reasons given in support of such a program focussed on potential difficulties encountered by some bingo players, such as spending too much time or money and domestic problems resulting from bingo. However, one respondent felt it would remove the freedom of choice, and one felt that more information about the program was needed. This topic prompted one service provider to note that bingo is not viewed as a form of gambling, and more education about the potential negative impacts is required.

The interviews also covered issues applicable to family and friends of problem gamblers. Among family and friends of the problem gambler, the most common method of seeking assistance was through self-referrals and from friends and family members. The majority of family members or friends who sought assistance did so when the gambler was in the "final desperation" phase.

Five of the service providers did not offer any programs for family or friends of problem gamblers. Among nine organizations that did, four had a caseload of approximately 10 clients per month, three saw between 60 and 100 clients per month, and one reported 680 clients per month. Most of these client contacts are new every month, and continued contact was reported as unknown by the service providers. It is not clear whether these individuals are receiving the assistance they need and do not require continuous assistance, or whether they are not receiving adequate help and are giving up on the process.

It was determined that programs offered for families and friends of problem gamblers are similar to those offered for the gambler. The programs are best described as informational, support and coping assistance, and counselling. A few comments by service providers suggested that a lack of awareness exists about problem gambling at the community level. Some service providers also thought that social agencies need to be better integrated for early detection of the problem.



Less information was obtained from family or friends seeking assistance. For instance, two organizations collected information in eight domains including demographics, and the type of problem. Three other organizations recorded either the client's name, the type of problem, or a narrative report.

Six of the nine agencies conducted follow-up of family members or friends; however, three did so upon request or as needed, one contacted the people twice within a few weeks after contact and one attempted to contact the individuals on a weekly basis.

## CONCLUSIONS

Prevalence studies conducted in Nova Scotia suggest that approximately 3 to 4 per cent of the population are experiencing moderate to severe problems with their gambling. However, the interviews conducted with 14 service providers suggests that only a limited number of these people are seeking treatment. An important question is why? It was determined that most of the gamblers seek help in the "desperation" phase of gambling. Speculating that problem gamblers who do not seek help have not yet reached the desperation phase may be a costly assumption. Thus, a significant issue is determining why some problem gamblers seek treatment while others do not.

Another area of concern is the inconsistency of screening methods for identifying problem gamblers. The South Oaks Gambling Screen is widely recognized as an efficient tool for screening problem gamblers, *when combined with a clinical assessment*. Likewise, the DSM -IV is intended for use by clinicians to adequately assess whether a person requires treatment. Beyond this, in order to assess social, health, and other impacts of problem gambling, it is important to implement a consistent and objective screening criteria.

The Authority has reported on treatment statistics of problem gamblers since 1995. The evidence continues to suggest that VLTs constitute the most problematic form of gambling in Nova Scotia. However, there is also evidence that problem gamblers do not confine their gambling activities to

one form. Moreover, 'social' forms of gambling, like bingo, can also cause harm to individuals and families. This is an important observation since many Nova Scotians do not consider bingo as "gambling." Internet gambling is also an area of concern that must be monitored.

The programs offered for problem gamblers and their families are quite diverse, and this is not intended as an evaluation of them. However, there appears to be a requirement for evaluation criteria that would allow each organization to assess their strengths and weaknesses. External evaluations should also be performed periodically to ensure problem gamblers obtain the assistance they require. Moreover, although it is essential to have well-trained clinical staff to provide treatment, the assistance that can be offered by gamblers in recovery should not be overlooked as an important resource.

The service providers, for the most part, appear to be in favour of programs that allow people to voluntarily exclude themselves from specific gambling activities. However, as several noted, this must be viewed as just one avenue in assisting people to manage their gambling.

Finally, it is imperative that service providers begin recording information about the problem gamblers they are in contact with. The Authority recognizes the strict ethical requirements for confidentiality and anonymity. However, a great deal of information can be gathered and stored in aggregate form, which will not identify in any way the individuals involved. Demographics and other information such as the types of gambling and precipitating factors are invaluable tools to social researchers. When this information is triangulated with data from other agencies in contact with problem gamblers, a clearer picture of the social and economic impacts will begin to emerge.

## ***SOCIOECONOMIC STUDY OF VLTs***

As noted in Chapters 1 and 4, the Nova Scotia House of Assembly passed Bill 17, *An Act to Impose a Moratorium on Additional Video Lottery Terminals and to Provide a Study of VLTs*, in June 1998. Part of the legislation included a mandate to study the socioeconomic impacts of video lottery terminals in the Province. Porter Dillon Limited, in association with

Sterling Research Incorporated, carried out an assessment of the socioeconomic impacts, and delivered a final report in April 1999.

In their conclusions, the authors pose a philosophical question: "At what point [does] our society prohibit activities from the population to prevent individuals from harming themselves and others around them?"<sup>14</sup>

Examinations of public opinions measured by the AGA since 1996 suggests this is not an easy question to answer. Public opposition toward video gaming in the province has remained relatively constant since 1996, from 70 per cent in 1996 to 66 per cent in 1999. Additionally, 72 per cent in 1996 considered that video lottery terminals had negative to very negative social impacts.<sup>15</sup> The 1999 public opinion survey found that 55 per cent would prefer to have video gaming removed from the province, even if it meant increased taxes for them.<sup>16</sup> Still, 80 per cent in 1997 agreed with the statement that "people should have the right to choose whether or not they want to play video gambling machines."<sup>17</sup> In 1998, 39 per cent of survey respondents felt it was an individual's right to decide if they wanted to play VLTs, 49 per cent thought their community should have the right to have VLTs banned, and 11 per cent were unsure.<sup>18</sup> Forty-eight per cent in the same survey also agreed that video gaming is "a form of entertainment," and 62 per cent agreed it provides "important revenues for government."<sup>19</sup> Thus, it appears that the salience of public opinion surrounding video gaming is mixed.

The authors of the Porter Dillon study also argue that, "people must be able to make informed decisions as to what is acceptable in their communities, as well as whether they wish to become involved."<sup>20</sup> They continue, "It appears that there is a lack of understanding about video lottery gambling, it's impacts, who may be at risk for developing problems, and other associated issues."<sup>21</sup> However, since 1996, the Authority has continued to observe a lack of knowledge pertaining to problem gambling and its impacts. This has been found in two focus group studies conducted by the Authority in 1996 and 1997, as well as public opinion surveys contracted by the Authority in 1998 and 1999. For instance, in 1998, 22 per cent of surveyed respondents believed that VLTs could be found in corner stores in Nova Scotia, when, in fact, they had been relocated to licensed premises in 1993. Additionally, both the 1998 and 1999 survey determined that a

substantial majority of Nova Scotians are unknowledgeable of the estimated prevalence of problem gambling in the province. Finally, 34 per cent of the respondents in the 1999 survey were not at all interested in receiving additional information on the early warning signs of problem gambling, or the impacts of problem gambling in Nova Scotia.

## NOTES FOR CHAPTER 3

- 1 Readers are cautioned that statistics are from samples of the adult population, and the information provided here has been deduced exclusively from answers provided by the respondents.
- 2 While participation rates differ substantially across some activities, we caution that differences in question format, ordering, and timing of data collection may have affected these trends. For instance, the surveys in 1996 and 1997 were carried out in February and March, whereas the 1998 survey during midsummer and 1999 at the end of summer.
- 3 The 1999 question did not include office pools. Nevertheless, reporting of office/sporting pools appears unstable, which could be due to definitional problems and recall.
- 4 Attendance figures in previous surveys were determined by asking people if they had attended either casino. The attendance figures here have been derived from questions about play at the casinos. However, some people may have attended in the past year without playing any of the games.
- 5 The Gaming Corporation reported that slot revenues for the Sydney casino was up 2 per cent, and revenue from table games was lower than in 1998. This does not contradict the survey results once we have accounted for the margin of error.
- 6 See Chapter 3, note 4.
- 7 These results may be due to differences in sampling and weighting. The previous samples were disproportionately stratified by the Halifax Regional Municipality, Cape Breton Regional Municipality, and Rest of Province. The 1999 sample comprised a provincially stratified random sample. Consequently, there was no requirement to weight the results by region.
- 8 See Chapter 3, note 7.

- 9        Although approval for bingo went to 69 per cent in 1998, Sterling Research noted in its report that this may be an anomaly.
- 10       We note that the question changed between 1998 and 1999, which could have affected the results.
- 11       For instance, it is unknown how many of the 'problem gamblers' would fit within the diagnostic criteria of the DSM-IV.
- 12       Statistics do not total 100 per cent due to multiple responses.
- 13       In total, the Authority identified 52 organizations that provide counselling and other assistance to problem gamblers. Most of these were interconnected by satellite offices, and only the main office was contacted. This left 16 possible interviews, of which, 14 were completed.
- 14       Nova Scotia Standing Committee on Community Services (1999). Socioeconomic Impact of Video Lottery Terminals, p. 5.
- 15       Omnifacts Research Limited (1996). "A Study of Gambling in Nova Scotia: General Population Survey," A Year in Review: Gaming in Nova Scotia: The First Annual Report of the Nova Scotia Gaming Control Commission 1995-1996, Appendix B.
- 16       Focal Research Consultants Limited (1999). "A Survey of the Prevalence and Perceptions of Gaming in Nova Scotia, 1999," Nova Scotia Alcohol and Gaming Authority Annual Gaming Report 1998/1999, Vol II.
- 17       Corporate Research Associates Incorporated (1997). "1997 Survey on Gaming in Nova Scotia," Nova Scotia Alcohol and Gaming Authority Annual Gaming Report 1996/1997, Appendix B, p. 14.
- 18       Sterling Research Incorporated (1998). "A Survey of the Prevalence and Perceptions of Gaming in Nova Scotia," Nova Scotia Alcohol and Gaming Authority Annual Gaming Report 1997/1998, Vol II., Appendix B, p. 23.

- 19 Ibid. p. 29.
- 20 Nova Scotia Standing Committee on Community Services (1999).  
Socioeconomic Impact of Video Lottery Terminals, p. 5.
- 21 Ibid, p. 5.



# CHAPTER

## ASSESSING IMPACTS

### *INTRODUCTION*

This chapter takes its direction from Section 56(1) of the *Gaming Control Act*, which mandates the Nova Scotia Alcohol and Gaming Authority (the Authority) to:

**(e) carry on a continuous study of the social, health, justice, economic and environmental impact of casinos and other lottery schemes.**

Through the examination of these impacts, the Authority endeavours to ensure that the gaming industry is regulated and managed in a socially responsible manner. Equally important, is an objective presentation of the evidence of gaming impacts so that Nova Scotians can remain informed regarding the benefits and consequences of this activity. The Authority, through its various research initiatives, attempts to identify both the positive and negative aspects of gaming, in order to advance a balanced debate over gaming issues.

Positive and negative aspects of gaming can also be considered in terms of benefits and costs - to the individual, family, community, and society at large. In order to make a full assessment of gaming, it is necessary to quantify as many benefits and costs as possible, but some are impossible or difficult to measure. Consequently, any analysis of gaming impacts on society is certain to be incomplete; a fact that must be appropriately considered in any gaming industry policy decision. It would be imprudent of anybody, including the Authority, to reach a simple conclusion that "gambling is good," or "gambling is bad" without conducting thorough and rigorous research designed to assess gambling impacts as fully as possible.



An accurate evaluation of gaming impacts must rely upon appropriate identification, costing, and relative weighting of many factors. Moreover, the costs and benefits of gaming need to be considered in the context of the overall effects that gambling has on society. Researchers face the unenviable requirement of trying to quantify costs and benefits although many of the social and economic effects are intangible in nature. For example, the emotional anguish experienced by family members of a problem gambler is difficult to precisely measure due to diverse societal values, which vary among jurisdictions, communities, and individuals. As Porter Dillon Limited aptly observed in a socioeconomic impact analysis of VLTs, "the weighting of these positives and negatives, however, is a matter of judgement based on an understanding of the values of Nova Scotians."<sup>1</sup>

Considerable time, effort, and resources need to be expended in order to fully evaluate the impacts of gaming. Some jurisdictions have spent millions of dollars to examine the social and economic benefits and consequences derived from gaming, and are still no closer to knowing the real net outcome. To date, Nova Scotia has received good value for its research dollar, with a number of high quality gaming studies to its credit, some of which have commanded attention internationally. However, efforts must be continually applied to ensure that the public's interest in gaming is protected, benefits are maximized, and potential negative consequences are minimized.

This chapter presents statistics and research findings that cover the social, health, justice, economic, and environmental impacts of gaming in the Province. Although these impacts are treated here as distinct, in actuality they are largely interrelated. Generally, however, the state of current research is not yet at a point where all of the interrelationships among multiple-impacts can be fully considered.

The Province of Nova Scotia is striving to develop research projects that will present a more comprehensive examination of gaming in order to provide a complete picture of the kinds and scale of resultant impacts. An example of this evolving research emphasis is the work completed for the Authority by MPM Gaming Research, that formulates a model linking "together the types of gaming activities, the types of players and the types

of social impacts within a convenience context.<sup>22</sup> Similarly, Porter Dillon's study, conducted for the Community Services Committee of the House of Assembly, examined the social and economic impacts of video lottery terminals on the Province.<sup>3</sup>

Despite recent research initiatives designed to synthesize multi-dimensional impacts, the majority of research findings presented in this chapter can be attributed to only one impact. The information is largely presented individually under the impact categories that the Authority is responsible for studying.

The remainder of this chapter presents a summary of research findings conducted for the Authority, or for other Nova Scotia government departments. The reader is referred to the Appendices for the respective treatise. Much of the discussion cited here is quoted verbatim or paraphrased from the original research reports.

## **SOCIAL IMPACTS**

### **CONVENIENCE GAMING AND SOCIAL IMPACTS**

In January 1999, MPM Gaming Research submitted to the Authority its final report entitled, Convenience Gaming and Social Impacts in Nova Scotia, the study presents a conceptual framework for the study of the social effects of gambling in Nova Scotia, and proposes a research agenda based on the conceptualization. The project initially emanated from a lack of previous research examining the effects of gambling in a comprehensive manner, accounting for impacts at the individual, community, and societal levels. The model is intended to lay the groundwork for future studies that will encompass these aspects, and provide the Authority with a better assessment of the impacts arising from gaming activities.

The MPM study included compiling, reviewing, and assessing the relevant literature, collecting secondary data sources, visiting library sites, interviewing experts and key informants, conducting focus group studies and carrying out life history studies of gamblers. The aim was to develop the conceptual framework and identify key research questions and methods. The research process identified a convenience model of gambling as the most suitable framework for understanding the social effects of gambling in Nova Scotia.

As MPM Gambling Research notes:

“The convenience model of gambling emphasizes locals rather than tourists as consumers and stresses that gambling is no longer an occasional activity or holiday experience. It has become a significant urban and rural leisure activity in its own right. The economic and social effects of the spread of convenience gambling are likely, therefore, to be different from those found in resort based destinations such as Las Vegas or Atlantic City. Convenience gambling may primarily reshuffle spending from other goods and services to the gambling industry, rather than stimulate growth. Because of the limited

population base, there is pressure in a convenience gambling jurisdiction to try to broaden participation in gambling and increase the level of spending of the gambling public. Social effects which are hidden or exported out of tourist gambling economies will be more visible and enduring in communities shaped by the recent development of convenience gambling."<sup>4</sup>

MPM Gaming Research noted that it is necessary to relate the concept of convenience gambling to specific gaming activities and specific types of gamblers. To examine the social impacts of gambling in Nova Scotia, MPM focussed on the four main forms of gambling, including: video lottery terminals, casinos, lotteries, and bingo. In terms of gambler types, MPM differentiated between occasional/recreational gamblers, serious social gamblers, and problem gamblers. Generally, the distinction between these gambler groups is based on varying degrees of knowledge and skill levels of gambling activities, risk taking, size of wagers and pay-outs, and interaction with other players.

MPM Gaming Research then went on to identify areas where social impacts occur. They are: 1) family, 2) workplace, 3) education, 4) community, and 5) governance. Each category can entail both positive and negative impacts that can range in extent dependent upon the gambling activity and the type of gambler. MPM Gaming Research identified principal impacts for each respective category, based on an extensive literature review. They are:

**"With regard to workplace impacts,** the research is sparse and focuses on estimating the social costs of the problem gambler. Occasional and regular gamblers and their social impacts on the workplace have not been studied. Our focus group research suggests that most people conceptualize gambling as leisure behaviour distinct from work, although they recognize both positive and negative social effects and these vary by the type of gaming activity.

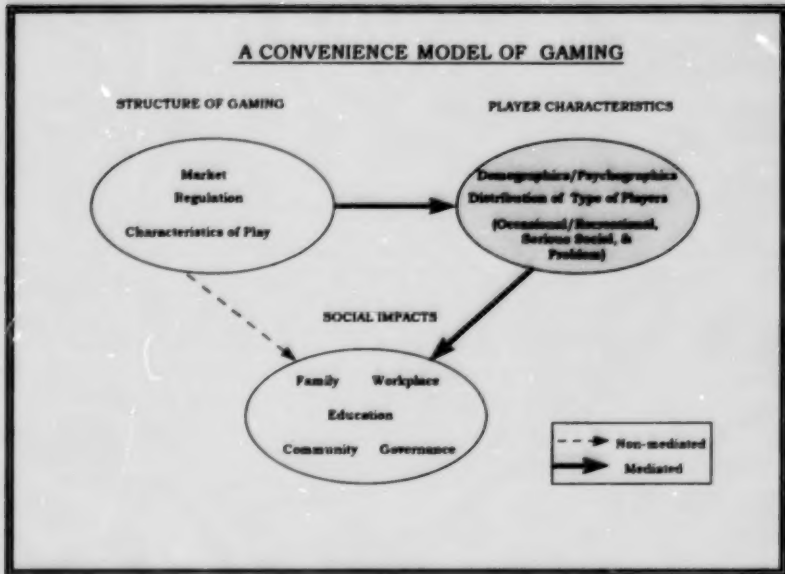
“With regard to **education impacts**, there is a strong focus on gambling and adolescence in the literature, but little explicit research that looks at positive or negative impacts of gambling more generally. While some research emphasizes negative impacts such as poor school attendance, lack of commitment to educational goals and decreased social ambitions associated with gambling, other studies suggest that gambling may provide positive educational impacts in that it conveys important lessons about self control, setting boundaries, taking risks responsibly and learning to cope with gain and failure. Our focus group research participants noted primarily economic and welfare related benefits and the social costs of negative role modeling on youth and possible gambling problems.

“With regard to **community impacts**, we formulated the idea of community very broadly as: (i) a local community, (ii) a social group, and (iii) a self defined network. Most of the literature on community impacts tends to emphasize the local community and to stress single issues such as crime, tourism, traffic congestion and the “problem” gambler. This literature also notes that there are numerous distributional issues related to community impacts. An especially important one [but one that needs testing<sup>5</sup>] is that in the convenience gambling marketplace, a small proportion of players seem to generate a large proportion of gambling profits and government revenues. These same players also generate a large proportion of the social costs associated with gambling, while their activities, ironically, contribute to benefits that are more broadly distributed within the community (i.e., community and sports centres, fire halls and equipment, educational resources, etc.). Our focus group results suggest that most participants saw gambling as making more of a positive contribution to the community rather than a negative one.

“With regard to **governance impacts**, most research tends to emphasize an economic cost-benefit approach. What is absent are better ethnographic understandings of the social effects of gambling by type, and how particular gambling activities and the interaction between them constitutes the so-called “problem gambler.” One type of player may be “addicted” to the social world of gambling while another may be “addicted” to the game. We need, therefore, more refined data on the exact social costs and benefits for each type of gaming activity.”<sup>6</sup>

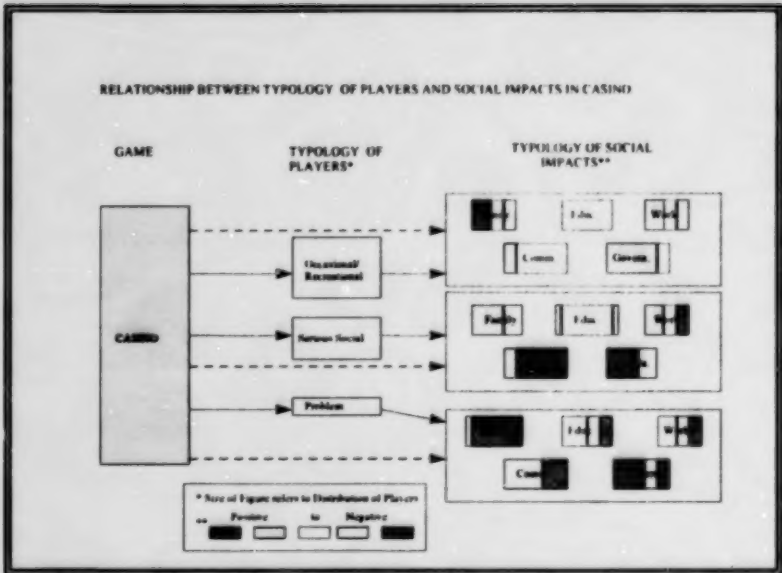
MPM Gaming Research’s model of social impacts draws out the causal links between the structure of the game, expected player characteristics, and predicted social impacts. Beyond these causal links, there are also direct links from the type of game to the social impacts. For example, “Community and governance impacts, in particular, are shaped by the structure of the market and the system of regulations which affect the size, distribution and management of revenues, the extent of economic spin-offs and the political ramifications of promoting convenience gambling.”<sup>7</sup> The relationship and linkages among the structure of the gaming activity, player characteristics, and social impacts is presented in Item 4.1.

#### Item 4.1



MPM Gaming Research states that, because social impacts are disaggregated and the causal links are visible, their model allows a comparison of social impacts across gaming activities and player types. These comparisons are accomplished by applying the model to each of the four major types of gambling (bingo, lotteries, casinos, and video lottery terminals). For each gaming activity, the composition of player types will vary, as will the resultant social impacts from each player category. For each gaming activity, MPM Gaming Research maps out the expected player types and social impacts, both positive and negative, based on its findings from a literature review, informant interviews, focus group research, and life history studies with gamblers. As an example, the relationship between player type and social impacts for casinos is depicted in Item 4.2.

## Item 4.2



The report prepared by MPM Gaming Research presents a lengthy discussion of the interrelationships among gaming activity, player type, and social impacts, which is briefly capsulized here. However, the reader is referred to the full text of the report, presented in Appendix C, for the complete discussion of these interrelationships.

MPM Gaming Research found that the type of gaming activity provides a range of **family impacts** on gamblers. Among the positive effects are: diversions from daily/family pressures, additions to family entertainment, enrichment of social interaction and improved family relationships. Negative family impacts include: financial problems, interpersonal conflicts, emotional crises and marital breakups. Negative family impacts seem to be concentrated mostly among problem players, while positive family impacts are more widespread and dispersed. The model predicts that bingo play will largely impact positively on families and communities,



with few tangible negative effects. Lotteries are expected to have fewer positive benefits for players' families compared to other gaming activities because of limited socialization; and even for serious social and problem players, the negative impacts on family finances and relationships will be limited. The entertainment experience for a growing number of regular casino players is also expected to have positive family impacts with few offsetting costs. On the other hand, the serious financial and emotional troubles resulting from video lottery play are expected to have significant negative impacts on the family, especially for problem players.

In terms of **workplace impacts**, most gamblers had difficulties in viewing their gaming participation as having either negative or positive impacts on the workplace. Potential benefits include: relief from work routines, stress reduction, employer/employee cohesiveness, increased work morale, business contacts, and occasionally the development of cognitive skills that might be transferable to the workplace. Negative impacts can include: absenteeism, tardiness, lost productivity, declining work morale, poor employee and employer relationships, theft from employers and job loss. In terms of gaming activities, bingo will have little effect on the workplace, as will lotteries; casinos and video lottery terminals can be potentially more detrimental to the workplace, particularly for problem gamblers.

Positive **educational impacts** can include raising funds for school activities and resources, particularly through charitable bingos and lotteries; while negative impacts can include the potential of educational deprivation and of youth gambling among children in families with a problem gambler. The model of convenience gambling predicts that bingo will have more positive educational impacts than other types of gambling. Lottery and casino players, on the other hand, will experience few, if any, positive or negative impacts on education. Since video lottery gaming appears to be more attractive to younger players, there is the potential for more serious and detrimental educational consequences among this population of players.

The **community impacts** of gambling tend to be defined in economic terms, such as the benefits of direct and indirect job creation. However, these economic benefits are often accompanied by direct and indirect social costs that communities may incur, such as increases in illegal activity and

in the number of problem gamblers. Gambling also provides numerous non-monetary social benefits for community members such as opportunities to socialize, to engage in recreational activity, to participate in community matters, and to enhance community identity. Balanced against these social benefits are the negative effects of gambling such as deterioration in the physical and mental health of citizens and changes in the moral fabric of the community, violence and suicide. Preliminary findings suggest that bingo and charitable lotteries provide communities with resources they would not otherwise have. On the other hand, lotteries and video lottery gaming provide greater employment opportunities in communities while casinos offer limited and restricted employment benefits. Regardless of gaming activity, problem gamblers can add substantial costs to communities, and the potential for growth in problem video lottery gaming may overshadow any revenue benefits.

In terms of **governance impacts**, gambling can be seen as positive in that it contributes to the economy and to government revenues. Additional benefits such as increased employment, business development, new tourism, tax relief, and enhanced services are expected to accompany the proliferation of gambling products and to result in a better quality of life. However, there are also significant costs associated with the expansion of gambling, and current research has not adequately accounted for the seriousness and magnitude of these costs. Problem gamblers, irrespective of gaming activity, cite the need for legal and health care services related to gambling activities, and identify the need for appropriate programs to educate people about the effects of gambling.

Throughout the discussion of social impacts, MPM Gaming Research makes a number of suggestions for additional investigations to substantiate the relationships between gaming activity, player types, and resultant impacts. The authors conclude their report by presenting a series of research strategies to further validate the constructs of the convenience model, and to better understand the social impacts emanating from gambling activities. These strategies were based on the following factors, which are discussed fully in the report: 1) predictions of the convenience model; 2) "best practice" in the literature; 3) gaps in the literature; and 4) issues raised in our preliminary fieldwork. Readers are referred to Appendix C, to find the proposed research projects presented in their

entirety in the final report submitted by MPM Gaming Research. The Authority will consider these projects for future research based on prevailing priorities, topical concerns, and budgetary restraints. This year, the Authority engaged MPM Gaming Research to study consumer income and expenditure patterns related to gambling, which is discussed next.

## **CONSUMER INCOME AND EXPENDITURE PATTERNS**

Following completion of its conceptual model of convenience gambling in Nova Scotia, MPM Gaming Research examined the relationships between consumer income/expenditure patterns and gambling (Appendix D), as part of the second stage of their study. As stated in MPM's final report, "a detailed study of consumer income and expenditure patterns, therefore, would contribute greatly to an understanding of the positive benefits of gambling for consumers and the 'opportunity costs' of gambling expenditures overall."<sup>8</sup>

MPM claims that the expansion of gambling has largely grown from an increase in consumer discretionary spending. It suggests that, "positive social effects arise from the enjoyment of the gambling product," while "social costs emerge when gambling siphons off money or time which are normally used for non-discretionary purposes."<sup>9</sup> MPM examines gambling expenditures in relation to consumer income and other competing expenditures.

The objectives of the study are:

- ▶ to clarify the relationship between gambling expenditures and other forms of consumer spending, sources and levels of income, and debt;
- ▶ to evaluate distributional issues related to gambling expenditures as they affect the costs and benefits of gambling;
- ▶ to better understand the consumption benefits derived from gambling; and

- ▶ to compare and contrast Nova Scotia with other jurisdictions on these aspects of gambling.

MPM Gaming Research analysed data from Statistics Canada's 1996 Family Expenditure Survey, and 1997 Survey of Household Spending, using both descriptive and multivariate techniques. Specifically, MPM explored: the relationship between gambling expenditures and the level and source of household income; the distribution of gambling expenditures across the population; the effect of gambling on household expenditures on necessities; and variations in expenditure patterns by intensity of gambling. This analysis was conducted for three jurisdictions: Nova Scotia, Saskatchewan, and Canada as a whole.

Among some of the significant findings observed by MPM Gaming Research, are the following:

- ▶ "Household income is positively associated with gambling in all three jurisdictions, but income is not a predictor of the amount spent on gambling in Nova Scotia."
- ▶ "Higher gambling rates are found in the middle age groups. "Young" and "senior" gamblers are more evident in Saskatchewan than in Nova Scotia."
- ▶ "Higher gambling rates are found among married couple households with either children or relatives. One person households have the lowest rate of participation in gambling."
- ▶ "Unlike Saskatchewan and Canada where gambling rates are higher in larger urban areas, in Nova Scotia gambling rates are not significantly different between rural, small town and urban areas."
- ▶ "As a percentage of income, lower income groups spend more on gambling products than do other income groups and this regressive relationship is more evident in Nova Scotia than elsewhere."

- ▶ “While seniors are less likely to gamble than middle-age groups, those who do gamble spend a higher proportion of their income on gambling products in all three jurisdictions.”
- ▶ “Gambling expenditures are generally inversely related to education on all measures of intensity in all jurisdictions, with distinctly lower dollar amounts and proportion of income spent by households with post secondary education. In Nova Scotia, 4 out of every 10 households in the top gambling quintile and 6 out of every 10 households in the high intensity gambling group are households where the education of the reference person is less than nine years.”
- ▶ “Households who depend on government transfer payments do not gamble more intensely than other households in the province.”
- ▶ “Gambling expenditures generally do not negatively affect spending on the basic necessities of food and shelter in Nova Scotia. Gambling, however, does negatively affect households’ ability to save and plan for their financial futures.”
- ▶ “In Nova Scotia, gambling expenditures are supplements not substitutes for spending on recreation, alcohol, food from restaurants and home entertainment.”
- ▶ “Spending on charitable donations is negatively related to gambling in all jurisdictions.”
- ▶ “In Nova Scotia, as in Saskatchewan and Canada, the highest proportion of households report expenditures on government lotteries, followed by casinos and slots, then bingos. However, in Nova Scotia average spending on bingos ranks second to government lotteries.”
- ▶ “In Nova Scotia, participation and spending on casinos and slot machines increases with income and education and is higher in urban areas.”

- ▶ "In Nova Scotia, spending on bingos is higher in lower educated and older households than in other education and age groups, but it does not differ by income level or size of community."<sup>10</sup>

These findings tend to support the postulations put forward by MPM Gaming Research with the convenience model of gambling. The findings also serve the Authority in terms of better understanding the profile of gamblers and the effects of gambling. For example, the analysis suggests that gambling can be considered a regressive tax due to the inverse relationship between income and gambling expenditures. As well, although the results indicate that gambling does not detract from spending on the necessities of food and shelter, or on other discretionary leisure and recreation items, gambling negatively affects household savings and charitable spending. Armed with such findings, the Authority and other partners are better able to design remedial programs to address such inequities and misappropriations.

## **YOUTH GAMBLING - PERCEPTIONS**

Current research figures show that four to seven per cent of adolescents in Canada and the United States have a gambling problem.<sup>11</sup> Nova Scotians may not be an exception. In 1993, Omnifacts Research sampled 300 adolescents in Nova Scotia and found that 61 had gambled at some point, 9 per cent were considered 'at risk for problems,' and a further 3 per cent displayed signs of problem gambling.<sup>12</sup> The Nova Scotia Student Drug Use 1996 survey of 3,790 students in grades seven, nine, ten and twelve showed that 68 per cent of the students had gambled previously, and 32 per cent did so monthly. Moreover, 2 per cent reported a desire to stop gambling, but did not think they could.<sup>13</sup>

The Authority conducted 12 focus groups with urban and rural youths in grades seven, nine, and eleven (Appendix E). The goal was to explore adolescent definitions of gambling and reasons for gambling, perceptions of gambling as a risk-taking activity, participation and access to gambling, and, potential influences on youth gambling, including advertising and promotions. Focus groups are a qualitative method of research, and the reader is cautioned not to infer the results beyond the participants in the

groups. Further, the Authority intended this research as an exploratory tool to describe issues in youth gambling that require additional study.

Activities defined as "gambling" included cards for money, slot machines, lottery tickets, sports betting, wagering on horses, and 'simple' or 'dare' bets. The youths rarely mentioned casino table games and VLTs. They also considered bingo and raffles to be an "innocent" form of gambling. The researchers surmised that participation in the activity, societal acceptance, and media representations of gambling activities that reinforce traditional definitions, may all influence youth perceptions of gambling activities.

Adolescent definitions of gambling appear related to age, gender, and region. Most of the youngest participants referred to the consequences of gambling, which comprised losses, as opposed to the act of gambling in their discussions of definitions. Girls were more likely to mention wagering possessions, beyond monies, and young rural girls were most inclined to think of gambling addictions when defining gambling.

The predominant reasons given for why people gambling were "addiction," "to win money," "for fun and excitement," and, "to pass time." Although the youths cited gambling addiction as a reason for gambling, they did not discuss it. Also, several male adolescents held an attitude that gambling was unlikely to lead to any dire consequences. Particular gambling activities specified this notion. For example, many youths across the groups stated that scratch tickets are a harmless form of gambling. Some male youths also thought of gambling as a way to "make money." The focus groups uncovered a lack of knowledge about problem gambling, which may be contributing to these misconceptions.

The youths self-reported gambling behaviour suggests that they were not frequently engaged in gambling activities, nor were they wagering large amounts of money. Approximately one-quarter of the participants reported playing cards for money frequently (weekly to monthly) and/or betting on sporting events. The typical wager ranged from pennies to a few dollars, and was contingent on the activity. The adolescents rarely arranged card games in advance, they most often arose as a way to pass time. On the other hand, boys organized sports pools, usually at the beginning of a sports



season. Other gambling activities that the youths, or others their age, were involved in included scratch tickets, betting on carnival games and/or school fights, dice games for money, tossing coins, bingo, and 'dare' bets.

Scratch tickets appeared the most readily available legal form of gambling open to the adolescents in the focus groups. This is, in large part, due to their parents or extended family members purchasing the tickets either as gifts or when the youths requested them to do so. The purchase of scratch tickets by minors emerged only as a possibility in the urban focus groups, and was noted as inconsistent among retailers. Urban youths reported being able to buy scratch tickets at some retail locations but not others. Even so, most of the adolescents did not seem interested in spending their money on scratch tickets. They would, however, accept them as gifts, and several stated they would occasionally ask their parents to buy them. "Carnival" gambling also appears sporadically available in various locations. For instance, many rural youths reported playing black jack and roulette at their school winter carnivals. Access to Nova Scotia casinos and VLTs may depend largely on whether youths have false identification, and are willing to use it. A few urban grade eleven participants maintained they had been in the Halifax casino, but they stated it would have been impossible without false identification. Apart from two urban youths, who claimed to know of illegal VLTs, the adolescents did not report involvement in VLT gambling. Additionally, the rural adolescents felt access to VLTs in their town was inconceivable because the staff of the licensed lounge would know them.

As noted above, prevalence estimates of disordered youth gambling varies between 1 per cent and 4 per cent. Still, just one participant across the groups thought of gambling as an adolescent risk-taking activity. This is significant since the youths recognized drugs and alcohol as potentially hazardous activities. However, they did not consider their gambling activities as possibly harmful because they did not know anyone their age who had a gambling problem. Additionally, media representations of problem gamblers do not typically profile adolescents. Likewise, 'gambling addicts' discussed in the groups were all adults, involved in adult activities like slot machines and VLTs. Since the youths did not engage in these activities, they did not see any potential for harm. They considered themselves more at risk if they became involved in "heavy"



gambling. For these reasons, the risks associated with gambling may be extraneous to them. While education is a logical intervention strategy, researchers have shown that "DARE" (Drug Abuse Resistance Education), a widespread drug education program in the United States, has had no effects on adolescent drug abuse.<sup>14</sup> Consequently, evaluating program effectiveness of education strategies that aim to prevent problem gambling among youth is important.

The focus groups revealed that the largest influences on youth gambling might be found in the family or school. Many participants knew of a gambling activity in which their parents engaged. These ranged from purchasing lottery tickets to attending bingo, from playing cards with friends to occasional casino visits. Most claimed a family member had given them a scratch ticket at least once. Several also described organized betting within their households on sports, or attending bingo with a parent or extended family member. Rural participants discussed sporting pools that teachers carried out at their school. While the students who participated did not have to wager any money to win a prize, nonetheless, the adolescents felt it was an "innocent" form of gambling. As noted above, some schools hold charity casinos with students during winter carnivals. The rural youths also cited examples where their schools had enlisted students to sell raffle tickets for fund-raising purposes.

Another potential influence on youth gambling is peer pressure. Although adolescents in the groups reported they would not feel pressured if asked by friends to play cards for money, the researchers noted that "dare" betting takes place. This may suggest some peer pressure exists where youth gambling activities are involved.

Deciding the impact of advertising and promotions on youth gambling using focus groups is impossible. Nonetheless, it appears that youth are very aware of lottery advertising and other promotions. Additionally, the focus groups revealed that gambling advertising and promotions may be sending youth misleading messages or crossing the age barrier in targeting youth as potential consumers.

Most of the adolescents from across the groups could recall, without prompting, at least one television, radio, or billboard advertisement for

lottery products. Several urban, and some rural youths also recalled casino advertising. The youths thought that these ads portrayed winning as guaranteed and/or gambling as fun (or fun if you win). After viewing a television lottery advertisement, many of the adolescents concluded the ad conveyed a message that being rich is fun, lottery tickets will lead to money and happiness, and that winning on lottery tickets was either easy or guaranteed. Half the groups also mentioned the pop group, *The Bare Naked Ladies*, and *Kraft Dinner*, both of which the ad featured. Both aspects appealed to several youths. Upon viewing a beer advertisement, the bulk of the youth felt the ad's message was that drinking beer was fun. The consensus was that lottery advertisements lacked credibility because they did not show the odds and winning was not guaranteed, whereas drinking beer could be fun. Nevertheless, several grade nine and grade eleven participants thought that neither ad portrayed the possible negative aspects of lotteries or alcohol consumption.

Many adolescents also recalled a television advertisement for a video purporting to show how to win at slot machines. Some of these youths felt a winning strategy with slot machines was achievable, which is an incorrect assumption.

In exploring other gambling promotions, the researchers asked the participants to comment on a Father's Day Card that included a scratch ticket inside. The cover of the card displayed a "Father Otter" and a "Baby Otter," seated in a canoe, with a tag line on the card of, "On Father's Day Dad, I'm sure glad to have someone like you." The general feeling across the groups was that the card would appeal mostly to children younger than 10 years old. Very few considered it an adult gift. When the researchers asked them how these children would obtain such a card, since scratch tickets are age restricted, they reported they would have to get their mother or another adult to purchase the card. Several grade eleven participants considered this a "sneaky marketing ploy," that would force people to buy the card in an attempt to appease young children who wanted it for their fathers. We note that lottery products have been targeted as Father's Day and Mother's Day promotions, which is another potential influence in the familial realm.

In summary, several important findings emerged from the focus group research, all of which require further study for verification. It is not surprising that youth engage in gambling activities, since they are engulfed by socially accepted gambling activities in the home, at school, and in the larger social environment. Advertising for lotteries and, to a lesser extent, the casino is pervasive. We cannot infer the impact of this advertising, but conveying "dream" messages may influence youth to believe that being rich is "fun," or that money will buy happiness. True or not, we have to ask whether these are the types of messages we want young people to be receiving. Using "family days," such as Father's Day and Mother's Day for gambling promotions could also target youth. Ensuring this does not take place is the industry's responsibility. Further, promotions describing winning strategies for any gambling activity may lead to misconceptions and problematic gambling behaviour. Adolescents need to learn that they cannot "make money" from gambling, and that gambling activities are strictly games. On the face of it, these promotions could lead to the wrong perceptions. In fact, a few adolescents appeared to have already developed misconceptions about slot machines. Finally, adolescents seem to think about gambling differently than adults. We should ensure that research and intervention strategies encompass and address their perceptions of the issues.

## **HEALTH IMPACTS**

### **NOVA SCOTIA VIDEO LOTTERY PLAYERS' SURVEY**

In June 1997, Focal Research Consultants Limited was contracted by the Department of Health, Problem Gambling Services, to conduct a survey of video lottery players to determine:

- ▶ the proportion of players exhibiting problem VL gambling behaviour;
- ▶ demographic/characteristics of VL players and the subset of problem players;
- ▶ impacts on lifestyle; and
- ▶ a delineation of the risk indicators that will assist in designing prevention and treatment strategies.”<sup>15</sup>

Focal Research delivered the *1997/98 Nova Scotia Video Lottery Players' Survey* in October 1998 (highlights report presented in Appendix F). The Authority recognizes this study as a significant contribution to the understanding of Video Lottery gambling. Indeed, Professor Mark Dickerson, a widely respected gambling researcher at the University of New South Wales, Australia, has observed that it is an “excellent survey . . . that brings together for the first time very many of the emotional, cognitive and behavioural components of problem gambling in a single, representative and well conducted study.”<sup>16</sup> It has also been cited along with other Nova Scotian studies in the Australian Productivity Commission's report.<sup>17</sup>

### **Findings**

The key findings of the study are presented in two sections: Provincial overview of VL play, and Problem Gambler Analysis.

## Provincial Overview

The study begins by segmenting players into three categories: 'non-VL players' (61.5 per cent of adults in Nova Scotia), 'casual players' (32.8 per cent of adults), and 'regular players' (5.7 per cent of adults). Casual players did not play on a regular basis, and spent, on average, \$1.29 per month. Casual players comprised almost 75 per cent of the players who had engaged in video gaming the previous year, and accounted for 4 per cent of the revenue. Regular players played video lottery at least once a month or more, and spent an average of \$243.52. Although regular players made up 25 per cent of those who had played VLTs in the previous year, they accounted for approximately 96 per cent of the revenue. Within the casual players another segment was identified as 'lapsed regular VL players,' who used to play regularly at some point but now played less frequently. These players comprised 4.5 per cent of adults in Nova Scotia.

It was discovered that among regular players, 25 per cent played VLTs but did not necessarily like the game. Focal Research suggests this is an indicator of habit or compulsion and may represent potential problems for a significant number of these players.

Demographic characteristics were also examined by player segments and it was determined that, compared to other adults, regular players are more likely to be young (19 to 24), male, single, with lower levels of education, and living in multi-adult households without children. However, there were also significant differences by demographics within the regular player segment. Thirty-four per cent of regular players would play 'every time' they came across a VLT, and were described as: 55 years of age or older, living in single person households, separated/divorced/widowed, with household incomes of less than \$25,000, and a vocational education.

Looking at social and leisure activities, the regular players were attracted to entertainment that offered exciting or physically stimulating criteria, as opposed to cultural or educational activities, or anything involving personal involvement.

The regular players were observed to be "consummate gamblers." They were attracted to games of chance more than other adults in the province.

They played more gaming options on average, were interested in all forms of gambling, and reserved about 24 per cent of their gambling funds for non-VL games. More than half of the regular players engaged in on-line lottery draws, and nearly one-third played instant tickets. This player segment was also more likely to play bingo, card games for money outside of a casino, slot machines, Pro-Line, and other sports betting.

Accessibility was seen as a factor influencing play, in that the regular players engaged in video lottery gaming more than half the time they were in a VLT site for 'other' reasons, such as having a drink or playing pool. However, in spite of the high level of impulse play, Focal Research states that, "planned play (ie. those who are at a location specifically to play the machines) is more strongly associated with problem VL gambling."<sup>18</sup>

More than half of the regular players smoke, 62 per cent of these players do so when playing VLTs, and 20 per cent smoke larger quantities of cigarettes while playing VLTs. However, regular players tend to not drink heavily while playing, and 26 per cent stated they never drink at all.

Comparing regular players with casual players, it was determined that the former spent nearly three times as much on monthly entertainment and gambling. Still, no differences were found in general entertainment expenditures, indicating the gambling expenditures were much higher for regular VL players than casual players. On average, regular players devoted 56 per cent of their entertainment expenditures to VLTs.

### **Problem VL Gambler Analysis**

The current video lottery players were divided into three groups: 1) infrequent players (play less than four times a month); 2) frequent players (play four or more times a month); and 3) problem players (based on the results of three independent measures).

Sixteen per cent of the regular player segment or .92 per cent of adults in Nova Scotia were considered to have a problem with Video Lottery play in 1997/98. Focal Research notes that 75 per cent of the regular players who engage in video gaming are "relatively free of problems," and further, "it is reasonable to conclude that the vast majority of Regular Players derive

benefit from the entertainment value of the games without suffering any lasting ill effects."<sup>19</sup>

Nevertheless, the problem players contribute a substantial proportion of the VLT revenues, spending, on average, \$808.88 per month compared to \$228.50 for Frequent Players and \$53.49 for Infrequent Players. It is estimated that the problem players account for just over half of the annual revenues from video gaming. Still, problem players are attracted to all forms of gambling and, spend on average, more than other VL player segments. A high expenditure on slot machines suggests that this form of gaming might replace VL among problem players if video gaming were removed and slot machines were still present.

Access and machine design is considered as possibly facilitating problem play. Sixty-five per cent of the problem players stated they feel a strong desire to play VL whenever they are near a VL machine. A majority (78 per cent) support the restriction of VL machines to three or four locations in Nova Scotia, which may be an indicator of their desire, but inability, to stop or reduce their play. As for product design, Focal Research asserts, "The products are designed to enhance the illusion of control and the role of skill, which reinforces the Problem VL gambler's superstitions about VL play . . . [and] leads to chasing behaviour . . . a major cause of their VL gambling problem."<sup>20</sup>

Problem players are more likely to hold incorrect beliefs about the odds of winning when they play. They are more likely to believe they will win when beginning to play, and to believe they are going to win after a long string of losses.

Problem players also reported experiencing strong physiological and emotional responses while playing VL that other player segments did not report. Focal Research finds that these "responses are symptomatic of the individual's heightened response (arousal level) to the play of the games. This suggests they just can't quit when they know they should, or even run out of money."<sup>21</sup>

As for situational factors, problem players are more likely to go to a VLT site with the express purpose of playing VL games, and also to select a



VLT site based on the quality of the game area. They are less likely to be distracted by or interested in other entertainment options in the venue. Problem players are also less interested in entertainment activities that involve social interaction. Despite this, problem players often play VLTs with other players, either on the same machine or a nearby machine.

Demographically, compared to the other regular players, the problem players were more likely to have less than grade nine education, be between 50 to 59 years of age, reside in two adult households without children, and to be separated/divorced/widowed.

Apart from age, the research also identified indicators that could be used on-site to identify problem players. Session duration is viewed as a strong indicator of problem VL play, since problem players spend, on average, 189 minutes per session compared with 30 to 60 minutes among other regular players. They are also more likely to be found at sports bars, other "non-bar type locations," such as restaurants, and aboriginal VLT sites. Focal Research notes that, "at any given time, at any given location approximately half of all those adults playing video lottery games will be problem VL gamblers."<sup>22</sup> Additionally, problem players are much more likely to groan, swear, curse or yell, or kick a machine while playing, and will comprise the majority of those players engaging in such behaviour.

Fifty-seven per cent of problem VL players had been playing for more than four years at the time of the study. In the year leading up to the study, 33 per cent had delayed bill payments, 23 and 21 per cent used personal savings and credit cards respectively, 11 per cent sold personal property, and 9 per cent had spent mortgage or rent payments. Forty-nine per cent had spent family monies earmarked for other purposes, and approximately one-third had developed debts they had not paid back.

Eighty-five per cent of the problem players reported feelings of guilt over their VL play, and 50 per cent indicated they are sometimes depressed. Over half stated that VL had negatively affected their relations with family and friends, with 55 per cent reporting their families or friends were worried about them, 48 per cent disclosing they had lied about their VL play, and approximately 27 per cent stating they are anxious and irritable when not playing, and they have trouble sleeping.



Coping strategies used by the problem players to mitigate their play do not appear to be very successful. However, the most successful strategies mentioned were: bringing a budgeted amount to the VLT site without bank or credit cards, initiating the aid of spouses and/or friends, and avoiding VLT sites.

Focal Research concludes by stating, "the results of the Nova Scotia VL Players Survey provide a comprehensive overview and profile of video lottery play in the province."<sup>23</sup>

### **Methodological Critique**

Notwithstanding the excellent work conducted by Focal Research, methodological and theoretical issues with the "Problem VL Player" segment of their study have been raised.

Focal Research identified 'Problem VL Players' using three independent measures:<sup>24</sup>

- ▶ a derived attitudinal score of 16 or higher from six statements measuring: levels of guilt over time or monies spent while playing VL, strains on relationships at home as a result of VL, VL play as a form of escapism, and lying about VL play;
- ▶ a rating of 5 or higher on a 10 point scale that self-designates an individual's degree of problems with video lottery (ie. not at all serious to a serious problem); and
- ▶ the individual had ever spent more time or money playing VL games than they thought they should, and the problem was either partially or fully unresolved (emphasis theirs).

Focal Research notes that **"respondents had to qualify on at least two of the three measures before being included in the Problem VL Gambler segment."**<sup>25</sup>

Focal Research also observes that, "there were 105 Regular VL Players who met this nominating criteria. There were 12 respondents who did not

qualify on the first two measures, yet stated unequivocally they are currently experiencing problems with their VL play and have not resolved the problem. Given the players' perceptions of their VL gambling, it was decided these individuals must be included in the Problem Gamblers segment."<sup>26</sup>

MPM Gaming Research has raised concerns about the methodology used to identify the 'problem VL players.' They note that the proportion of problem players was ascertained through a telephone survey, and this methodology has been deemed weak for determining problem gamblers in the population.<sup>27</sup> While this is a reasonable criticism, the majority of studies that examine problem gambling in the general population (including the past two prevalence studies in Nova Scotia) have employed a telephone survey methodology, and to single out this study is unwarranted.

However, questions exist as to whether the 'problem VL player' segment is sufficiently describing problem gambling within any recognized criteria. MPM Gaming Research finds that since "self-selection" techniques were a primary source of the identification of problem players, "those who 'feel' their VLT play is problematic [are] considered in an analysis of problem play *'regardless of their qualifications on other behaviour or attitudinal measures.'*"<sup>28</sup> In a critical analysis of the SOGS, Chambers and Schrans (1998) argued the SOGS uses "self-identified problems, criticisms, arguments, and feelings of guilt [that] could easily be measuring an individual's social network's reaction to their gambling, despite little or no impact on the individual or others around them."<sup>29</sup> The measures used by Focal Research fall within these same parameters, and are therefore subject to the same argument.

These criticisms may be pedantic in the context of the present debate over the definition of problem gambling.<sup>30</sup> Still, while Focal Research demonstrated the internal reliability of their measure, it did not establish its validity. A question arises as to why Focal Research was not contracted to conduct its study in two stages similar to the Baseline Market Research prevalence and follow-up studies in Nova Scotia in 1996/97.<sup>31</sup> By recontacting the 'problem VL players' for clinical evaluations, Focal Research would have been able to demonstrate the new measure's predictive validity in the general population. Not having done this may

invite additional commentary and detract from the exceptional value of this study.

## **Conclusions**

The *1997/98 Nova Scotia Video Lottery Players's Survey* offers significant findings to contribute to the understanding of VLT gambling. Given the controversies surrounding this gaming activity, the study will likely benefit any initiatives undertaken to educate players, modify games, alter venues, or regulate participation in an attempt to alleviate problem VLT gambling. The Authority recognizes the value of this research, and intends to employ the findings in identifying future research projects and developing policies and regulations related to the VLT program.

## **VLT FEATURES AND PLAYER TRACKING**

Sterling Research was contracted to conduct two focus groups with regular video lottery players on January 14, 1999 (Appendix G). The purpose of the focus groups was to explore what, if any, characteristics of video lottery machines might lead to problematic play behaviour, and player reactions to on-line tracking of their play. The reader is cautioned that the results from the focus groups cannot be inferred to the larger population of regular video lottery players. Nevertheless, the findings are consistent with much of the *1997/98 Nova Scotia Video Lottery Players Survey* thereby triangulating the results of both studies.

The participants attributed problem play to several machine features and other characteristics of video lottery play. They thought the opportunity to win bonus credits led to "chasing" behaviour, since the players would try to recoup losses by winning the bonus. Additionally, some participants claimed that 'near misses,' where they would come close to a large win, would entice them to continue playing. Several participants referred to winning a large jackpot on line games as "getting the bells," and related difficulties associated with the lights and sounds that were emitted when this occurred. They observed that players who are "cashing out" (topping their play), or getting ready to "cash out," will often continue to play after they or someone else "gets the bells." Additionally, one person who

claimed to be "addicted," and scored 16 on the SOGS, stated he began playing video lottery after a friend of his "got the bells." This person described the sensation of the lights and sounds as if he were in a state of ecstasy. Several other participants reported that the sounds of the bells emitted by the machine were mesmerizing.

The participants did not feel the speed of the machines led to problem play. However, the 'stop button' is apparently used by some players to speed up line games, which may lead to increased expenditures. By pressing the stop button the machine does not go through a complete set of spins. This allows players to learn more quickly whether they have won or lost. However, it also leads to more possible bets being placed in a shorter period. Many participants reported the outcome of each spin was predetermined, and the stop button allowed them to find out more quickly whether they had won or lost.

The concept of controlling the outcome of play also arose. Many participants claimed they had little control over the machines, but later contradicted themselves, suggesting some illusion of control. More players felt they had some control over video card games than line games. However, gambling fallacies may be a stronger cause of problematic play, and some people may be more susceptible than others as a result of education, motives for play, and other factors.

Most participants reported difficulties in keeping track of their time and expenditures while playing VLTs. They claimed this was partly the result of not having clocks in the establishments they frequent, and partly a result of concentrating on the game. Regardless of the reason, the inability to keep track of time and money posed a problem for many of them. While most stated they knew if they were overextending themselves per session, they did not have any sense of how badly until they had finished playing. They then could tell precisely how much money they had spent.

The participants identified mechanisms they thought would help to reduce problem play on VLTs. Still, debate erupted over how successful these changes would be with extreme excessive players. The participants suggested the machines be programmed so players could set a limit and have the machine pause for a minute or two once they had reached their

limit. This would force all players to look around and take a "breather." Many thought that a small clock in the corner of the machine would help them keep track of the time they spent on the machine. However, they were split about the clock displaying the time of day or time spent on the machine. It was observed that all of the participants were very concerned about other people around them seeing how much time or money they spent on VLTs.

The participants were also interested in the machine keeping a running tally of the time and money placed in the machine per session. The dilemma with this option was that, again, the players did not want this on the screen and yet they did not think many people would use a button to see where they stood at any given point in time. As one participant stated, "If you're a problem gambler or you like to play a lot, you don't want anybody to know about it." In spite of this, all of the participants stated they would like to somehow keep track of what they expended in time and money. It was also suggested that the lighting around the VLTs be increased so that players who were there for long periods of time could not hide away.

Finally, the players liked the idea of being able to measure their levels of play in relation to others in the province. However, until on-line tracking was mentioned, they could not think of how to do this without identifying themselves, which they dismissed outright.

The participants immediately became suspicious when asked how they would feel if video lottery machines regularly gathered information about individual players' expenditures of money and time. Their first thoughts were that the information would be used to determine who was winning so "the odds could be turned down" for that person. A few participants thought the information would be used to develop games that the players would find impossible to resist. Once the participants clearly understood that: a) no one could identify them, b) a government agency would gather the information, and c) it would be used, at the very least, to provide direction and resources to areas with problem gambling, they appeared to support the idea. The way to do this, according to the players, was to have a swipe card or pin number that would be mandatory to play VLTs.

The only information the players stated they would provide for tracking purposes was their age and gender. Even after full discussion of on-line tracking, and the possible social and health applications, several participants stated they would be reluctant to provide any demographic information, and one stated he would just lie.

Several types of 'player warnings' were described and they all received mixed reactions. The main reason was the participants did not want others seeing their level of play. However, most felt that if they could access a machine in private, and it provided monthly information about their time and expenditures, and showed where they fell within normative guidelines, that it may help them.

The findings from the focus groups and the 1999 public opinion survey in Chapter 3, suggest that some characteristics of VLTs may be leading to problematic play behaviour. The bonus play, lights and sounds, stop button, and 'near misses' were all reported as influencing some players to overextend themselves. Many players lose track of time and expenditures while playing. The participants decided that they would like to see some measures to help them in this regard, but implementing these may be difficult, since they were also very sensitive about others seeing their level of play. Online tracking was met with suspicion and probably would be by the population of VLT players if implemented without a successful communications strategy. Any alterations to the machines should be carefully tested to ensure they do not further exacerbate problem gambling behaviour.

## **TREATMENT OF PROBLEM GAMBLERS**

This section summarizes the profiles of problem gamblers who received treatment by the Nova Scotia Department of Health, Drug Dependency Services. Drug Dependency Services produced a profile for all those who scored a one or higher on the South Oaks Gambling Screen, despite the conventional threshold of three. It is important to note that the information presented here is indicative of gamblers in treatment with Drug Dependency Services, and inferences to the population of problem gamblers not in treatment may lead to incorrect conclusions.

The total number of new gambling profiles completed by Drug Dependency Services increased by 32 per cent to 469 in 1997, from 317 in 1996. The number of profiles remained constant in 1998 (Item 4.3). The increase between 1996 and 1997 could be due to a number of reasons including, but not limited to: increased awareness of assistance options, referrals from the Problem Gambling Help Line, changes in administration and recording procedures, more problem gamblers encountering severe difficulties related to gambling, or an increase in problem gambling.

### Item 4.3

#### Types Of Gambling Among Problem Gamblers By Gender

	1997			1998		
	Women (117)	Men (352)	Total* (469)	Women (132)	Men (333)	Total* (465)
<b>VLTs</b>	90%	93%	92%	95%	93%	94%
<b>Lotteries</b>	47%	57%	55%	45%	54%	51%
<b>Casinos</b>	33%	29%	30%	30%	34%	33%
<b>Card Games</b>	17%	26%	24%	12%	23%	20%
<b>Bingo</b>	36%	17%	21%	28%	16%	19%
<b>Sports Betting</b>	5%	13%	11%	3%	15%	11%
<b>Horse Track</b>	6%	7%	7%	3%	6%	5%
<b>Stock Market</b>	0%	3%	2%	0%	2%	1%
<b>Other</b>	3%	3%	3%	1%	4%	3%

\*Totals exceed 100 per cent due to multiple mentions

Source: Nova Scotia Department of Health, Drug Dependency Services

The ratio of men to women in treatment appears to be slowly narrowing. In 1996, the ratio was 4.5 and it decreased to 3.0 in 1997, and 2.5 in 1998.

In addition, reporting of card games outside of a casino has decreased to 20 per cent in 1998, from 28 per cent in 1996. The remaining activities have remained unchanged. VLTs continue to be most often reported as a problematic gambling activity, followed by lotteries, casino gaming, card games outside of a casino, bingo and sports betting. For a third year, a



small number of gamblers in treatment have reported difficulties with the stock market. The gambling profiles support an argument that gamblers in treatment have been involved in many different gambling activities. Evidence from a 1996 prevalence study in Nova Scotia also suggests that problem gamblers in the population are engaged in many forms of gambling as well (Baseline Market Research, 1996).

As depicted in Item 4.4, gamblers in treatment in 1997 and 1998 reported weekly participation in a wide variety of activities. In 1997 and 1998, the activities most frequently engaged in by people receiving treatment for gambling problems were VLTs, lotteries, "other" forms of gambling, and sports betting.

Between 1995 and 1998, approximately 80 per cent of problem gamblers in treatment reported travelling 10 kilometres or less to gamble. No data is available that shows the distance travelled to gamble among problem gamblers who have not received treatment. It is also unclear whether the distance travelled shows how far a problem gambler is willing to travel to gamble or whether it represents a preference for a convenient and comfortable location. It is not known, for instance, what differentiates the gamblers who travelled 11 to 50 kilometres to gamble from those who remained closer to home.



#### Item 4.4

##### Frequency Of Gambling Among Problem Gamblers By Activity

	1997			1998		
	Weekly	Monthly	Yearly	Weekly	Monthly	Yearly
<b>VLTs</b>	86%	11%	3%	85%	12%	3%
<b>Lotteries</b>	63%	22%	15%	66%	17%	17%
<b>Casinos</b>	35%	18%	47%	42%	12%	46%
<b>Card Games</b>	41%	19%	40%	43%	34%	23%
<b>Bingo</b>	51%	15%	34%	47%	18%	35%
<b>Sports Betting</b>	56%	19%	25%	66%	9%	25%
<b>Horse Track</b>	47%	9%	44%	35%	17%	48%
<b>Stock Market</b>	13%	3%	2%	20%	20%	60%
<b>Other</b>	64%	35%	1%	88%	6%	3%

\*Totals exceed 100 per cent due to multiple mentions

Source: Nova Scotia Department of Health, Drug Dependency Services

#### PROBLEM GAMBLING HELP LINE

Corporate Health Consultants (CHC) Atlantic operates the Problem Gambling Help Line in Nova Scotia, under contract with the Department of Health. In previous years, the Authority has obtained data from the Atlantic Gambling Help Line Annual Statistical Report, but CHC Atlantic has not yet summarized the operating statistics for the 1998 fiscal year.

The data that follows is for the period January 1, 1998 to December 31, 1998, and is based on monthly statistical reports provided to the Authority by the Department of Health. It is important to note that the information presented in the monthly reports is volunteered by callers. Additionally, the number of people who do not seek treatment or help is unknown. Thus, assessing the nature and extent of problem gambling in Nova Scotia from the information provided is impossible. Lastly, the Department of Health has undertaken an initiative to review the data and information collection

system for the Help Line. Once completed, it will ensure that an accurate overview of callers to the problem gambling help line can be obtained.

CHC Atlantic reported 5,827 calls to the Help Line during the 1998 fiscal year, a 47 per cent increase from the previous year. Among the total calls, 49 per cent (2,829) were gambling related. Of the total calls, 39 per cent (2,291) were from first-time callers and the remaining 61 per cent (3,536) of calls originated from repeat callers. Of the total callers, 53 per cent were male and 47 per cent were female. Approximately 38 per cent (2,200) of callers wished to remain anonymous. Throughout the year CHC Atlantic established follow-up contacts with 3,692 clients.

The monthly reports also presented information of the types of calls received by the Problem Gambling Help Line. Approximately 53 per cent of the calls were requests for information, 29 per cent required telephone counselling, and 18 per cent led to referrals to Gamblers Anonymous and Drug Dependency Services. Since reporting methods changed throughout the year, calls received between January 1, 1998 and October 31, 1998 have been categorized in this manner.

Among the callers who received telephone counselling, the majority were between the ages of 25 - 34 (31 per cent) and 35 - 44 (35 per cent). Of the remainder, 2 per cent were less than 19 years of age, 10 per cent were between 19-24, 15 per cent were between 45-54, 6 per cent fell in the 55-64 category, and 1 per cent were above 65.

The data also indicates that the majority of clients who called the Help Line in 1998, and received telephone counselling, began gambling between the ages of 25 and 34 (33 per cent), while another 31 per cent started between the ages of 35 and 54. Sixteen per cent of the gamblers reported beginning before reaching 19 years of age, and 18 per cent were between the ages of 19 and 24. Only 3 per cent were above the age of 55.

Based on the records of calls, it appears that the majority of callers receiving telephone counselling (61 per cent) were from the Central Health Region, which may be a result of easier access to gaming activities. Another 15 per cent called from the Eastern Health Region, 11 per cent from the Northern Health Region, and the remaining 13 per cent of callers

were from the Western Health Region. Fewer than 1 per cent of the callers were from out of the province.

Among those callers who were gamblers and provided information, 30 per cent indicated that their gambling had been a problem for less than one year. An additional 39 per cent indicated that gambling had been a problem for one to three years. Nineteen per cent of gambler callers stated that they had experienced gambling problems between four and six years, while the remaining 12 per cent of respondents had experienced gambling related problems for more than six years.

Video lottery terminals were identified most frequently as the type of gambling people experiencing problems were involved in. Among gamblers who reported the gambling activity they were experiencing problems with, 62 per cent identified VLTs, 12 per cent reported casino/slots, 6 per cent casino tables, 11 per cent traditional lotteries, 2 per cent sports betting, 2 per cent cards, and 1 per cent race track betting.

## **VOLUNTARY EXCLUSION PROGRAM**

The Voluntary Exclusion Program is a process administered by the Authority through the *Casino Regulations* of the *Gaming Control Act*. The program is designed for individuals who have difficulties controlling the urge to gamble; financial and/or personal problems which have resulted from gambling; or feel it is in their best interest not to participate in casino gambling. By signing a Request for Voluntary Exclusion form, an individual voluntarily agrees not to attend any gambling casinos in Nova Scotia.

To participate in the Voluntary Exclusion program an individual may obtain a Request For Voluntary Exclusion form from the Authority, the Gaming Corporation or a member of the casino security staff in Halifax or Sydney. The only authorized Request For Voluntary Exclusion form is that drafted by the Authority.

To ensure that an individual understands the terms of their exclusion, specifically that the program lasts indefinitely, an employee of the

Authority or the casino will review the voluntary exclusion process with the applicant. If the individual then decides to enter into the agreement, a copy of the signed Request For Voluntary Exclusion form and the individual's photograph are kept on file in both the Sydney and Halifax casinos. After signing this agreement, any person attempting to enter either casino can be identified by casino security staff and escorted from the premises.

If an excluded participant wishes to be reinstated he or she must contact the Authority and request an Application for Reinstatement of Access to the Casino(s) form. Once the application for reinstatement has been received, a representative of the Authority will contact the applicant and ask him or her to sign a Consent to Investigation form. This form gives the Authority permission to investigate personal and financial information regarding the applicant. Following the completion of an investigation, a hearing is held with the board of the Authority and the applicant to review all the information. The applicant also has the option of signing a Refusal to Consent to Investigation form; however, the signed form is presented as evidence during the application for reinstatement.

When the Authority reaches a decision, it is provided to the applicant in the form of a written order. If the Application for Reinstatement is successful, the applicant is permitted to re-enter the casinos upon presenting the written order to casino staff. If the application is not successful, the individual will not be allowed to re-enter the casino; however, he or she may apply for reinstatement at a later date.

Since the implementation of the program, there have been approximately 500 voluntary exclusion requests, depicted in Item 4.5.

#### Item 4.5

<b>Voluntary Exclusion Requests, March 1999</b>				
	<b>Halifax</b>	<b>Sydney</b>	<b>Annual Total</b>	<b>Cumulative Total*</b>
July 1995-March 1996			93	93
April 1996-March 1997	98	50	148	241
April 1997-March 1998	84	47	131	372
April 1998-March 1999	82	43	125	497

\* Cumulative Total does not reflect the actual number of individuals currently excluded.

Throughout the 1998/99 fiscal year, the Authority has received a number of reinstatement requests. Item 4.6 provides information on the number of Voluntary Exclusion Orders which have been reviewed by participants requesting to have their access to the casino facilities reinstated. In the 1998/99 fiscal year, eight individuals were fully reinstated; three were denied; and one individual who had applied for reinstatement did not appear at the hearing.

#### Item 4.6

<b>Requests To Revoke Voluntary Exclusion Orders, March 1999</b>			
	<b>Approved Probation</b>	<b>Denied</b>	<b>Other</b>
April 1997-March 1998	6	5	3
April 1998-March 1999	8	3	1

Within Canada, Newfoundland, Prince Edward Island, New Brunswick, the Northwest Territories, and the Yukon do not have permanent casinos. Of the provinces that offer this type of recreational activity, Alberta is the only province not currently offering a voluntary exclusion program for its participants. Also, Nova Scotia is the only province that requires a hearing for reinstatement. Below is a brief description of the voluntary exclusion program implemented by the remaining provinces.

## **Québec**

In Québec, the casino(s) are responsible for administering the voluntary exclusion program. The gaming regulators do not take an active role in the exclusion process. When individuals enter the exclusion program, they use their own discretion to determine how long the exclusion will last. The minimum exclusion time frame is six months and the maximum is five years. An individual can not be reinstated until after the exclusion period expires.

## **Ontario**

Within the province of Ontario, the voluntary exclusion process is administered by the three commercial casinos. The Alcohol and Gaming Commission of Ontario does not take an active role in the exclusion process. Individuals who enter the exclusion process, can use their discretion for the exclusion time frame. However, the minimum exclusion period is six months. Individuals involved in the exclusion process do not receive any promotional materials. When the exclusion request expires, individuals request that the self exclusion be revoked. A reinstatement process cannot be implemented until after the exclusion period expires.

## **Manitoba**

The Manitoba Lotteries Corporation administers the voluntary exclusion program for the province of Manitoba. As the regulator of the gaming industry, the Manitoba Gaming Control Commission does not take an active role in the exclusion process. Prior to January 20, 1999, individuals entering into the exclusion program in Manitoba did so indefinitely. Now individuals who exclude themselves do so for two years. After the two-year period, the exclusion automatically expires. If individuals wish to extend their two-year exclusion they must request an extension. Individuals who had previously excluded themselves indefinitely can request that the self exclusion be revoked after completing two years of the exclusion. Reinstatement to the casino(s) is not implemented until after the two-year exclusion period expires.

### **Saskatchewan**

The Saskatchewan Liquor and Gaming Authority administers the voluntary exclusion program within the province of Saskatchewan. When individuals enter the exclusion program, they use their own discretion to determine how long the exclusion will last. The time frame ranges from six months to five years. Reinstatement to the casino(s) does not occur until after the exclusion period expires, however, some exceptions may occur.

### **British Columbia**

Within the province of British Columbia, the BC Lotteries Corporation administers the voluntary exclusion program. When individuals enter the exclusion program, they use their own discretion to determine how long the exclusion will last. However, the time frames vary from six months, one year or indefinitely. Once individuals initiate the exclusion process they can not be reinstated until after the exclusion period expires or until a Self Exclusion Revocation form is filled out and processed.

## **DEPARTMENT OF HEALTH INITIATIVES**

The Department of Health (DOH), Problem Gambling Services, is actively engaged in developing and delivering programs targeted at providing an awareness, education, and treatment of problem gambling. The following outlines some of the Department's problem gambling initiatives which are either planned, under way, or recently completed.

### **Review Of Data And Information Collection System**

The provincial client data collection system, which provides information about the nature and extent of problem gambling in Nova Scotia, will be reviewed. If necessary it will be revised, within the limits of available resources, to ensure systematic, ongoing collection and analysis of the most pertinent data and information. The review will include the Department of Health's Problem Gambling Help Line, and analysis of data collected by the former Regional Health Boards. It is anticipated that this review, in combination with anecdotal information from Addiction Services counsellors throughout the province, will provide new and important insights about trends and patterns among problem gamblers and their families.



## **Review Of The Efficacy Of Outpatient Treatment**

Problem Gambling Services of the Department of Health will examine the merits of inpatient treatment vis-a-vis outpatient treatment for selected groups of problem gamblers. This will include a literature review and development of discussion papers. It is anticipated that this review, and the process of collaboration, will be valuable in determining the long-term treatment needs of problem gamblers in Nova Scotia.

## **Nova Scotia Video Lottery Players' Survey**

In 1997 the Department of Health, Problem Gambling Services, commissioned the *1997/98 Nova Scotia Video Lottery Players' Survey*. As noted earlier, it has been recognized by Dr. Mark Dickerson of Australia as an excellent study related to VLT problem gambling. A great deal of new information about the attitudes and behaviours of VLT problem players has been learned from this research. This is information that can be used immediately in the development of interventions for the prevention and treatment of problem gambling. For that reason, every reasonable effort is being made by the DOH to disseminate this information. The dissemination process includes workshops and seminars for professionals, and if possible, will include the development of public service messages for broadcast on radio and television.

## **Lapsed VLT Players Study**

The VLT Players' Study, referred to above, revealed that 4.5 per cent of Nova Scotians (31,000 adults) can be categorized as Lapsed Regular Players. This group of gamblers comprises individual adults who used to play VLTs once per month or more (at some time in the past) but who, at the time of the study, played once every few months or less often. The DOH has contracted Focal Research to conduct a study related to Lapsed Regular Players. The main objective of this study will be to determine the factors and circumstances involved in the decisions which regular players make to diminish their levels of play.

Data suggest that some of these Regular Lapsed Players used to be Problem VLT Players. This raises the question: why have they "lapsed" into what is (apparently) problem-free VLT play? Information, related to the characteristics and motivations of VLT Players who have (for whatever reason) diminished their levels of play, will be invaluable in determining



measures and strategies to address problem VLT play. It will also be crucial in establishing whether it will be possible to identify the characteristics and behaviours of Regular VLT Players who are at high risk of becoming Problem VLT Players.

The *1997/98 Nova Scotia Video Lottery Players' Survey* will serve as a framework for the conduct of the Lapsed VLT Players' Study. Also, the subjects identified as lapsed players during the 1997 study will comprise the sample for the Lapsed Players' Study.

### **Responsible Gaming Program**

In October 1999, the Department of Health, in partnership with The Tourism Industry of Nova Scotia (TIANS) and the Nova Scotia Gaming Corporation, launched The Responsible Gaming Program. This program is substantially based upon the successful "It's Good Business Responsible Beverage Program" developed as a collaborative venture between TIANS and the DOH. Much of the content is based directly upon the results of the *1997/98 Nova Scotia Video Lottery Players' Survey*.

The specific intent of the program is to provide VLT retailers and their staffs with the skills and knowledge required to develop, implement and maintain responsible gaming policies and procedures. The program is structured in two parts, one for owners and operators, and the other for servers. Each part comprises presentations by training specialists from TIANS in partnership with professionals experienced in the prevention and treatment of problem gambling. These presentations, combined with the exchange of ideas and exercises, will help to ensure that owners and employees of establishments with VLTs have the skills and knowledge necessary to maintain the safest possible recreational environment for VLT players and themselves.

The program is designed to provide information about problem gambling to patrons who show demonstrable signs of dependency and who request help. The program is not designed to turn owners, operators and servers into clinicians or into interventionists who assess the nature and extent of problem gamblers' dependency. The primary function of operators and servers will be to provide the information necessary for patrons to contact appropriate helping resources such as Addiction Services offices, the

Department of Health's Problem Gambling Help Line or Gamblers Anonymous.

It is anticipated that approximately 2,000 owners, operators, managers and servers will have completed the program by the 2000/2001 fiscal year. The program will be ongoing, and is expected to provide substantive opportunities for collection of data and the conduct of research.

## **VLT HARM REDUCTION STUDY**

This collaborative study among Dalhousie University, the Nova Scotia Department of Health and the Nova Scotia Gaming Corporation was initiated in 1997 as a joint venture between the Department of Health and the Nova Scotia Alcohol and Gaming Authority.

The study is continuing at the Dalhousie University Gambling Research Laboratory. Phase I, involving investigation of a series of questions relevant to the understanding of problem gambling and its correlates, has been completed. The specific questions in Phase I pertain to identification of attentional impairments in problem gamblers, the effects of VLT play on the consumption of alcohol among regular VLT players, and alcohol's effects on attention. This latter question is highly relevant to the understanding of co-morbidity of problem gambling and alcohol abuse.

All studies have been conducted in the "bar lab" in the Psychology Department at Dalhousie University. This lab is set up to resemble a real-world bar, officially licensed by the Authority, and equipped with two video lottery terminals.

The overall purpose of the study is to find ways to reduce the abuse of VLTs and alcohol among problem gamblers. The specific objectives are:

- ▶ to identify the characteristics of VLT players who develop problems with VLTs;
- ▶ to determine the nature and extent of the negative impact that VLTs have upon a minority of players;

- to determine the feasibility of chip modifications as means of mitigating problem play among players who develop problems with VLTs; and
- to examine the role which alcohol consumption plays in the development of problem VLT play.

### **Some Preliminary Findings And Implications**

- At a mildly intoxicating dose, typically consumed by many regular VLT players, alcohol impairs certain attentional functions. Problem gamblers may find such alcohol effects desirable and rewarding, thus increasing their risk for the development of drinking problems.
- Pathological gamblers show deficits in sustaining attention over time relative to social gamblers. These vigilance deficits may represent risk factors for the development of gambling problems.
- A risk factor for the development of gambling problems (life-long impulsiveness starting in childhood) is associated with an increased susceptibility to the effect of alcohol in creating difficulties in ignoring reflexively-activated response tendencies. It is possible that highly impulsive individuals may use alcohol to help them respond more "reflexively" during VLT play.
- VLT play selectively increases alcohol consumption relative to a control activity (watching a movie) among regular VLT players.
- Since alcohol in combination with distracting activities is associated with anxiety reduction, some regular VLT players may be using the combination of drinking and VLT play (a distracting activity) to produce short-term reduction of pre-existing anxiety and tension.

Subject to funding, Phase II will involve the conduct of *in vivo* interventions to verify and or amplify the lab experiments, and to further examine the reciprocal relations between VLT play and alcohol consumption. If possible Phase II will include testing the hypothesis that alcohol, in combination with distracting VLT play, is most effective in

reducing anxiety, and that this effect is stronger for pathological gamblers than for social gamblers. Information related to this issue is likely to have substantial implications for social policy.

## **CANADIAN PROBLEM GAMBLING INDEX**

The development of the Canadian Problem Gambling Index (CPGI) is a project of the Inter-Provincial Task Force on Problem Gambling. The research and development of this index is being conducted by a team under the direction of the Canadian Centre on Substance Abuse on behalf of the Inter-Provincial Task Force. Recent interest in measuring the prevalence of gambling in jurisdictions across North America has highlighted the shortcomings of available problem gambling indices. In particular, while the available measures appear to be good instruments for measuring pathological gambling in a clinical setting, they are perceived to be poor measures of problem gambling in the general population. Also, the measures of gambling prevalence presently in use in Nova Scotia have been developed for American jurisdictions. As a result, the goal of this research is to produce an instrument for the measure of problem gambling prevalence specifically for use in Canada, with general populations, in a telephone survey environment.

To date an extensive review of literature has been completed as well as a review of the topic by experts and key informants in Canada and the U.S. As a result of this phase, an instrument was developed for review by the Task Force and ultimate pilot testing by the research team. The pilot testing of the instrument is now underway. The purpose of this stage is to address the reliability, validity and classification accuracy of the CPGI. The research team is conducting phone surveys with three groups of respondents: non-problem gamblers, heavier gamblers, and self designated problem gamblers. Completion date of this phase of the project is intended to be December 30, 1999. At that point further testing and revision of the CPGI will take place. It is anticipated that the CPGI will be available for general use in September, 2000.

## **JUSTICE IMPACTS**

### **JUSTICE ORIENTED INFORMATION SYSTEM**

The *1997/98 Annual Gaming Report* noted that the Justice Oriented Information System (JOIS) may provide a mechanism to track crimes which were motivated by problem gambling. During the past year, Authority staff consulted with representatives with the Department of Justice to explore options to modify the JOIS in order to make more accurate assessments of justice impacts resulting from gambling.

The JOIS creates a statistical database to track criminal proceedings in Nova Scotia, including arraignments, preliminary hearings, trials and sentencing. The database categorizes crime statistics according to sections of the *Criminal Code*, and can provide information on charges and convictions for that particular crime. Although the JOIS can provide statistics on gambling related crimes as identified by the *Criminal Code* (e.g., keeping a gaming or betting house), it does not record such information as causal factors which motivated the crime. Therefore, the JOIS is not capable of determining how problem gambling may have played a role behind the perpetration of criminal offences. Other judicial processes, such as investigations related to pre-sentence reports, may reveal certain social or psychological factors contributing to the commission of an offense, including problem gambling. However, enquiry for such factors is not mandatory, and only a small proportion of criminals are subject to such investigations.

### **ANNUAL REPORT ON ORGANIZED CRIME**

The *Annual Report on Organized Crime in Canada 1999* (AROCC - 1999) presents a comprehensive review of organized crime activity in Canada. The Criminal Intelligence Service Canada (CISC) relies on information provided by its member agencies across Canada, including the Criminal Intelligence Directorate of the Royal Canadian Mounted Police. Information from the participating agencies is gathered for the collection and analysis of intelligence data related to organized crime.

The AROCC - 1999 indicates that organized crime outfits in Canada are benefiting from illegal gaming activity. This type of criminal activity is predominately associated with 'Traditional Organized Crime', which is classified by the AROCC - 1999 as consisting of Italian-based criminal organizations. While the drug trade remains the activity of choice for traditional organized crime groups, these organizations are reported to be involved in varying degrees with illegal gambling operations. This activity takes place primarily in Ontario and British Columbia. The Traditional Organized Crime outfits which own sports bars or cafes are known to use these venues to house illegal gaming machines and betting operations.

CISC has launched a national illegal gaming initiative in partnership with the Ontario Illegal Gaming Enforcement Unit. With the implementation of this initiative and a corresponding increase in illegal gaming intelligence, CISC anticipates a clearer picture of the extent of illegal gaming amongst criminal organizations in Canada.

## **GAMBLING AND CRIME: MEDIA REPORTS**

Over the course of the reporting period, a number of gambling-related crimes were described in Nova Scotian newspapers. Some of these articles are summarized below.

- ▶ "Judge Rejects Guilty Plea," The Daily News, August 5, 1999  
This report involves a 42 year old Nova Scotia man who was charged with cheating at play at a Sheraton Casino blackjack table. The incident in question involved secretly adding to bets (i.e., capping) after wagering had closed. The accused had initially entered a guilty plea to the charge, but this plea was rejected by the judge when a pre-sentence report indicated that the accused was not prepared to admit that he was at fault. A trial was set for April 10, 2000.

- ▶ "Bingo Game Held Up By Armed Robber," The Chronicle-Herald, January 5, 1999

A man armed with a hand-gun held up a Dartmouth bingo game. According to witnesses, this individual produced his weapon and asked the game's organizers to hand over cash. He then sped away from the scene in a car.

- ▶ "Police Seize Illegal VLTs," The Chronicle-Herald, March 12, 1999

As a result of four police raids which took place in the New Waterford/Sydney area, nine illegal gaming machines were seized. Charges included keeping a common gaming house and possession of an illegal gaming device. Sydney RCMP Constable Herb Martell was quoted as saying:

"Incidents of illegal gaming devices being installed inside businesses and private residences are on the increase and are causing concern for authorities and the general public."

- ▶ "VLT Addict To Try To Repay Mother-In-Law," The Daily News, March 27, 1999

A Halifax man was convicted of fraud over \$5,000 and sentenced to six months of house arrest after using his mother-in-law's banking card and P.I.N. number to obtain money for VLT gambling. The banking card and P.I.N. number had been provided to the man by the mother-in-law so that he could take care of her banking needs. The man withdrew \$12,000 from his mother-in-law's account over a four month period, and spent the money on video lottery terminals. A further condition of the sentence involved a restitution order in which the man was required to repay his mother-in-law the amount of \$5,000 by May 1, 1999. In The Daily News follow-up articles, dated May 14, 1999 and June 16, 1999, it was reported that the man had not yet paid back any of the money.

- ▶ "Gambling Addict Given House Arrest," The Bulletin (Bridgewater), April 28, 1999

A Bridgewater man was convicted of theft exceeding \$5,000 and sentenced to three months of house arrest after stealing from his housing cooperative. The man, who is an admitted gambling addict, was the president and signing officer of the housing cooperative. Over a nine month period, the man cashed illegitimate cheques in the name of the housing cooperative for a total of \$6,950. Amongst other conditions of his sentence, the man is required to pay \$50 a month toward restitution.

- ▶ "Company Fined \$60,000 For Gambling Offence," The Chronicle-Herald, January 12, 1999

Coinmaster Inc. was convicted of proceeds of crime offences and keeping devices for gambling. This Halifax company was fined \$60,000 for the offences, which occurred between January 1989 and December 1994. The charges followed an investigation by an RCMP task force which had been set up to uncover illegal gaming machines in the province. As a result of the operation, more than 300 gaming machines were seized and are now Crown property.

- ▶ "Mounties Probe Will 'Clear' Air," The Chronicle-Herald, July 13, 1999

The RCMP is probing a complaint lodged by two Sydney businessmen who were turned down for a \$1.4 million government loan to develop an in-room gambling system for hotel guests. The loan application was allegedly rebuffed after Techlink International Entertainment Ltd. officials refused to give one million shares in their company to two individuals with reputed ties to a former Liberal Economic Development Minister. The RCMP probe is ongoing.



## RCMP CASINO GAMING SECTION

Section 209 of the *Criminal Code of Canada* (the Code) creates an offence for anyone who intentionally cheats while playing a game of chance or holding the stakes in a game of chance. In an effort to ensure compliance with section 209 of the Code in Nova Scotia's casinos, the RCMP Casino Gaming Section continually monitors casino game play. Nova Scotia's casinos are equipped with state of the art surveillance equipment which is capable of monitoring all activity in the gaming area.

The Halifax Casino Gaming Section reported that three incidents were investigated in the calendar year of 1998. Two of the incidents were determined to be unfounded, and the remaining incident was cleared without charges. From January of 1999 to the date in which this report was prepared, six incidents had been reported. Of those incidents, two were determined to be unfounded. Of the remaining four incidents, one charge was laid and the three remaining incidents were cleared without charges. The Halifax Casino Gaming Section described 'cheat at play' incidents as being relatively infrequent, and attributed this to the players' awareness of security measures and precautions at the Sheraton Casino in Halifax. The Halifax Casino Gaming Section noted that when 'cheat at play' incidents do occur, they tend to involve the technique of 'capping' (adding casino chips to a bet after the wagering has closed) or 'pinching' (removing casino chips from a bet after the wagering has closed).

The Sydney Casino Gaming Section reported that in 1998, one incident was investigated but no charges were laid. From January of 1999 until the time this report was prepared, two incidents were investigated. Charges arose from one incident, although the ultimate charges were fraud related as opposed to 'cheat at play'. The Sydney Casino Gaming Section also acknowledged that 'cheat at play' incidents in the Sydney casinos are relatively infrequent. Officers attribute this to an awareness on the part of casino patrons that gaming activities in Sydney's Sheraton Casino are being closely monitored.

## RCMP PROVINCIAL ILLEGAL GAMING UNIT

The RCMP's Provincial Illegal Gaming Unit is responsible for investigating or assisting in the investigation of matters relating to illegal gaming activity. These investigations relate to gambling offences as described in the Code and Nova Scotia's *Gaming Control Act*. The Provincial Illegal Gaming Unit assumes a very active role in the investigation of illegal gaming devices (also known as 'gray machines'). Possession of a machine used to operate a lottery scheme is an offense pursuant to the Criminal Code, unless the operator holds a valid registration certificate issued by the Alcohol and Gaming Authority.

The Provincial Illegal Gaming Unit reported the investigation of 61 complaints in the 1998 calendar year relating to illegal gaming devices. In that year, 12 illegal gaming devices were seized, and eight successful prosecutions resulted from the seizures. For the period of January 1999 to the date when this report was prepared, the Provincial Illegal Gaming Unit reported 28 complaints relating to illegal video lottery devices. Investigations for this period resulted in the seizure of 11 machines. Nine charges have been laid and court action is pending.

## AUTHORITY INVESTIGATION & ENFORCEMENT DIVISION

The Investigation and Enforcement staff of the Alcohol and Gaming Authority is responsible for the enforcement of the *Gaming Control Act* and its regulations. This staff consists of the Director of Investigation and Enforcement, two field supervisors, a senior gaming analyst supervising three other gaming analysts, 24 compliance officers and the seven member RCMP Casino Investigations Unit. The following activities are monitored by the Investigation and Enforcement Division:

casino gaming (pursuant to the Casino Regulations);

- ▶ video lottery terminals (pursuant to the Video Lottery Regulations);
- ▶ Atlantic Lottery Corporation products (pursuant to the Atlantic Lottery Regulations);
- ▶ bingos and bingo operators (pursuant to the Bingo Regulations);

- ▶ bingo suppliers (pursuant to the Bingo Suppliers Regulations); and
- ▶ ticket lotteries licensed by the Authority (pursuant to the Ticket Lottery Regulations).

Inspections of registrants and licensees are focussed on encouraging an understanding of and compliance with Nova Scotia's gaming-related legislation and policies. Item 4.7 presents a tally of the number of inspections conducted by the Authority's Investigation and Enforcement staff for the fiscal years ending 1998 and 1999 respectively.

#### Item 4.7

<b>Investigation &amp; Enforcement Inspections</b>		
	<b>1998</b>	<b>1999</b>
Amusement/Theatre	7,776	6,552
Bingo	637	551
Casino	8,382	10,184
Casino ID Checks		677
Liquor	26,334	32,599
Liquor ID Checks	5,327	4,824
Lottery (Ticket)	35	207
Lottery (VLT)	5,978	16,809
Lottery (VLT) ID Checks		87

## ***ECONOMIC IMPACTS***

### **SOCIOECONOMIC IMPACT OF VLTs**

In June 1998, the Nova Scotia House of Assembly passed Bill 17, *An Act to Impose a Moratorium on Additional Video Lottery Terminals and to Provide a Study of VLTs*, which essentially capped the number of VLTs in Nova Scotia. The legislation also called for a study of the socioeconomic impact of video lottery terminals on the Province, to be conducted within six months. Porter Dillon Limited, in association with Sterling Research Incorporated, was commissioned to conduct the study, and presented their final report in April 1999, entitled, *Socioeconomic Impact of Video Lottery Terminals* (Appendix H).

Porter Dillon presented issues relevant to VLT gambling in Nova Scotia, including an explanation of the operation of VLTs, a comparison of the extent of VLT gambling, and a summary of the “pros and cons” of VLT gambling. It then conducted focus group interviews among non-VLT players, regular VLT players, and problem VLT players to “determine what social problems related to VLT use might be reduced or augmented in the event of a VLT reduction or ban.”<sup>32</sup> Porter Dillon also provided a detailed analysis of the economic and fiscal impacts of VLTs on the province, using an incremental impact estimation approach.

Porter Dillon concluded that the VLT issue in Nova Scotia is extremely complicated. As per Porter Dillon’s study proposal, the authors did not offer any specific recommendations to government concerning further restrictions on VLTs. Rather, the authors presented evidence of benefits and costs associated with further VLT restrictions, but noted that, “the weighting of these positives and negatives, however, is a matter of judgement based on an understanding of the values of Nova Scotians, which we feel are best interpreted by elected legislators.”<sup>33</sup> It should be noted, however, that the breadth and depth of Porter Dillon’s impact assessment was curtailed by time, budget, and resources.

Porter Dillon make a number of noteworthy observations and findings, including the following:

"Potential responses to VLT issues include further reducing the number of machines in Nova Scotia, modifying machines to alter playing characteristics, taking measures to limit play by specific users, and educating the public concerning the operation of VLTs and problems associated with excessive play."

"If VLTs are banned, our Focus Group research suggests casual VLT players will be largely unaffected; regular VLT players will shift to other forms of entertainment, including other forms of legal gambling; and problem VLT players will shift to other forms of gambling, including gambling on First Nations Reserves and illegal VLT gambling."

"Focus Group participants were fairly evenly split on the appropriateness of a VLT ban. Many felt VLTs place an undue burden on the social system. Roughly half of the problem players see a ban as the only way of keeping themselves from playing, notwithstanding that many later contended they would continue to play on illegal machines or at sites on First Nations Reserves."

"The primary benefit of a ban, in the opinion of most Focus Group participants, is that it would prevent young people who have not yet played VLT games from taking them up."

"The total household income impact on \$121.1 million in net VLT expenditures diverted to other gaming and leisure activities will be in the order of \$37.3 million. Proportionately, this is about 10 per cent less than the household income impact of the same expenditure on VLTs. On this basis, household income in Nova Scotia would be about \$3.9 million less, if VLTs were

eliminated, which translates into approximately 150 full-time equivalent jobs lost."

"VLT gambling is an efficient method of government revenue generation dependent on self-selected individuals who, for the most part, are as able as others to afford to play."

"Revenue will not be lost on a one to one basis if VLTs are banned. Money now spent on VLT play will be diverted to other economic activities that are taxed resulting in an estimated loss of \$57.1 million of the current \$80.4 million in revenue. Other gaming and leisure activities return less to the government because of higher operating expenditures and lower direct government revenue from consumer and operating expenditures."

"The costs of approximately 6,400 problem VLT players in Nova Scotia are estimated at about \$74.2 million, or \$6.2 million less than the gross government revenue gain from VLT operation. This is based on an estimated cost per problem gambler of \$11,600 derived from studies in other jurisdictions. Costs are related to employment cost, lost labour, health treatment cost, money taken from family necessities, bad debts, criminal justice, rehabilitation support services, welfare cost, and other factors. Data do not allow us to state definitively the quantity of these various costs in Nova Scotia. Banning of VLTs is unlikely to completely eliminate these costs."

"If VLTs are banned there will probably be benefits to suppliers and operators of illegal VLTs; First Nations Reserves, which may well expand the number of legal VLTs they offer to the current allowable maximum; and to remaining legal forms of gambling."

"If VLTs are banned, the primary current legal suppliers, licensed establishments, will be negatively affected and some may be put out of business."<sup>34</sup>

Porter Dillon concluded that, if VLTs are banned in Nova Scotia, household income in the province would decline by about \$3.7 million, 145 full-time equivalent jobs would be lost, and government revenue would decline by about \$57.0 million. As well, eliminating VLTs may not necessarily ameliorate problem gambling among VLT players, although abolition may reduce the number of future problem players. "To 'break-even' the removal of VLTs will have to result in a \$60.7 million reduction in problem gambling costs."<sup>35</sup>

As stated earlier, Porter Dillon left the evaluation of the benefits and costs of VLT sanctions to the political arena. However, it notes a general lack of understanding about the impacts of video lottery gambling, and identify a need for education about responsible gambling to help eradicate the incidence of problem play.

### **Socioeconomic Impact Of Other Gaming Activities**

The Authority has a statutory mandate to conduct research aimed at examining the impacts of gaming, both from an economic and a societal perspective. However, efforts to date have been limited to a unidimensional treatment of these concepts. As well, the Authority has recognized the difficulties inherent in attributing and valuing the benefits and costs of gaming. Consequently, the Authority deferred certain research initiatives intended to measure socioeconomic impacts, such as a proposal by MPM Gaming Research to examine social costs associated with problem gambling. Rather than undertake similar research, the Authority opted to await completion of the Porter Dillon report with the hope of adopting its methodology for similar socioeconomic assessments of other gaming activities.

Following completion of their report, the Authority commissioned MPM Gaming Research to review the methodology used by Porter Dillon to determine its validity and reliability, and to determine whether the study could be replicated for other types of gaming activities (Appendix I). The

Authority recognized the value of repeating a proven methodology, both in terms of cost savings and comparability of results.

MPM Gaming Research indicated that Porter Dillon made a number of interesting and important findings. They also noted that much of the research was derived from other studies or sources, with focus group interviews being the only original research conducted by the authors. As a result, MPM Gaming Research had serious reservations regarding the use of Porter Dillon's methodology for other gaming activities. As MPM Gaming Research notes:

"Overall, the Porter Dillon study raises some important empirical questions, maps an exploratory strategy for quantifying impacts and economic costs, and provokes further discussion and debate about the role of VLTs in Nova Scotia society and the best ways to study their social and economic impacts."<sup>36</sup>

However, they go on to say:

"We do not recommend that future research in gambling follow this model. In addition to our reservations about overall research design, the Porter Dillon study is, in our opinion, rather derivative and to apply its methodologies to bingo, casinos, or lotteries would require the pre-existence of numerous player studies, impact studies and additional detailed government statistical data."

MPM Gaming Research came to this conclusion based on the following, (detailed in Appendix I):

- ▶ The study lacked solid research to derive assumptions regarding VLT player behaviours. This absence of behavioural characteristics is even more pronounced for other gaming activities, which minimizes the opportunity to replicate the study.
- ▶ The research design, which combined focus group interviews with an incremental impact analysis, resulted in dubious findings.



Focus group findings cannot reliably be projected onto larger populations. As well, it appears that the incremental impact analysis is based more on the *1997/98 Nova Scotia Video Lottery Players' Survey*, the *CANMAC Economic Impact*<sup>37</sup> report, and government statistics, than it is on the focus group interviews. It should be noted that Porter Dillon was well aware of the limitations of focus groups, and had initially proposed to conduct a survey of VL players that could be extrapolated to the population, but this option was withdrawn due to logistical and budgetary constraints.

- ▶ Key assumptions were often drawn from other sources and studies, sometimes at face value with little consideration for variations in cultural, regulatory, spatial, or temporal contexts. For example, Porter Dillon stated the number of problem gamblers at 6,400 as reported in the *1997/98 Nova Scotia Video Lottery Players' Survey*, without critically evaluating the validity of this estimate. Similarly, Porter Dillon's estimate of the social costs of problem gambling, based on estimates from studies in Manitoba<sup>38</sup> and Wisconsin<sup>39</sup>, failed to consider variations in history, culture, maturity and mix of gambling markets, and player types.
- ▶ There are some questions regarding the validity of the economic impact analyses due to assumptions adopted and the mechanics of the calculations. For example, Porter Dillon used 'net expenditure' in their analysis but do not consider how distributional shifts may affect the overall economic impact (e.g., transferring income from spenders to savers). "Another problem is that the Porter Dillon's estimation was based on the assumption that all VLT money (\$121.1 million) is redirected to other gaming activities (which is a stronger assumption than their discussion of the players' behavioural responses warrants)."<sup>40</sup>

In conclusion, MPM Gaming Research stated that "the Porter Dillon study raises some fundamental questions that are important to ask and answer for other kinds of gambling. Unfortunately, there is an inadequate research base on which to build these estimates for different types of gambling."<sup>41</sup> The Authority is aware of other initiatives undertaken in other jurisdictions

to measure the socioeconomic effects of gambling; however, the state of current research to measure costs and benefits of gambling is not yet mature enough to allow definitive conclusions to be drawn. The Porter Dillon study is a step in the right direction, but more work must be done to adequately measure the impacts from gambling. It is likely that a variety of research methodologies and information sources will need to be employed in order to comprehensively measure impacts emanating from all gaming forms in Nova Scotia. Of course, this approach infers a significant investment of time, money, and expertise, so efforts should proceed prudently with coordination among major stakeholders.

## **VLT EXPENDITURE ANALYSES**

It was hypothesized in the 1998 report entitled *A Survey of the Prevalence and Perceptions of Gaming in Nova Scotia*, conducted by Sterling Research Incorporated on behalf of the Authority, that “as video lottery expenditures increased, expenditures on other gaming activities would also increase.”<sup>42</sup> While preliminary support for the relationship was found, the authors cautioned that further studies would have to be conducted due to sample size limitations.

To explore this hypothesis further, the Authority commissioned Focal Research Consultants Limited to undertake additional analysis of the data obtained in the *1997/98 Nova Scotia Lottery Players' Survey*.<sup>43</sup> The survey provided a rich data-set which detailed the play behaviours, expenditures, attitudes and characteristics of 711 regular video lottery players. The data was re-analysed in order to obtain reliable measures of the relationship between video lottery expenditures and other forms of gambling.

The analysis conducted by Focal Research is presented in Appendix J, and summarized here. The examination of the relationship between VL expenditure and expenditure on other types of gaming consisted of two primary analyses:

- ▶ **Segmentation Analysis:** whereby the data was grouped into four VL expenditure segments. Average participation rates and expenditures

for other gaming activities are compared among the four VL expenditure segments.

- ▶ Correlation Analysis: to test the relationship between monthly VL expenditures and monthly expenditures for other gaming activities.

For both analyses, gaming activities were categorized into the following groups:

- ▶ Total monthly gaming expenditures (including VLTs)
- ▶ Total monthly gaming expenditures (excluding VLTs)
- ▶ Combined lottery draws and instant tickets
  - ▶ Lottery draws only (including Lotto 6/49, Lotto Super 7, TAG, etc.)
  - ▶ Instant tickets only (\$1 and \$2 Scratch 'n Wins, Breakopens)
- ▶ Combined casino gaming
  - ▶ Slot machines
  - ▶ Table games (casino games, excluding slot machines)
- ▶ Bingo for money (excluding Lotto Bingo)
- ▶ Sports betting (including Pro-Line, other sports bets/pools)
- ▶ Other gaming (including charity raffles/draws, horse racing, card games outside the casino, and other betting such as dog races and off-track betting)

### **Segmentation Analysis**

The segmentation analysis examined gaming behaviour (participation and expenditure levels) in terms of the average amount spent on any gaming by Nova Scotian adults in a given month. To describe patterns among different segments of video lottery players, Focal Research delineated players by expenditures into the following groups:

#### **1) Non-VL Players**

Typically spend nothing on VL gambling in a month, comprising approximately 89 per cent of Nova Scotia adults.

2) Light VL Players

Spend between \$1 and \$20 and play generally fewer than four times per month, comprising approximately 7 per cent of adults.

3) Moderate VL Spenders

Spend between \$21 and \$100 per month and play on a regular basis but do not experience problems controlling their VL play; comprising approximately 2 per cent of adults.

4) Heavy VL Spenders

Spend over \$100 per month and play on a regular basis but nearly half of whom experience problems controlling their VL play; comprising approximately 2 per cent of adults.

Focal Research found that, at some point in the past, adults in Nova Scotia have tried approximately three to four of 14 different types of gambling activities available in the Province. Approximately 11 per cent of adults in Nova Scotia play any video lottery games each month, of which just over half (6 per cent of all Nova Scotia adults) can be characterized as regular players. Those adults in the Province who had spent any money on video lottery gaming are significantly more likely than their counterparts to have:

- ▶ tried (ever played) more gaming activities at least once in the past (5.3 to 5.6 versus 3.3);
- ▶ participated in more types of gambling over the past month (2.0 to 3.3 versus 1.0); and
- ▶ participated in more types of gaming on a regular monthly basis (2.0 to 3.3 versus 0.8).

In terms of expenditure, VLT gamblers in Nova Scotia participate in a wider variety of gaming options and, as a result, tend to spend more money on gambling overall in a given month than adults who do not play VLTs. Focal Research found that Nova Scotian adults spend an average of \$27 monthly on gaming activities excluding VLTs, and this amount significantly increases in relation to VL expenditures. Heavy VL spenders, in general, spent nearly twice as much on other types of gaming as Moderate VL spenders (\$122 versus \$61 per month), although adults in each group participated in a similar number of gaming options on a regular

basis. The expenditure pattern holds true for Light versus Moderate VL spenders as well (\$61 versus \$39 per month on gambling other than VLTs).

This direct relationship in expenditures is evident for lottery draws, instant tickets, casino gaming, and casino table games, but not so for bingo. For slot machines and "other" gaming activities, the average expenditure by Heavy VL spenders was significantly different than the other players, with spending levels three to four times higher than other adults. It should be noted that the amount spent on VLTs by Heavy VL spenders far exceeds their expenditures on other gaming options (about 87 per cent of their total monthly expenditure), and that their total gambling expenses are at least nine times higher than for other gamblers.

### **Correlation Analysis**

Focal Research conducted correlation analysis to test the relationship between monthly video lottery expenditures and monthly expenditures for the other gaming activities. Correlation analysis provides further support to the hypothesis that people who spend higher monthly amounts on VLTs also spend more on other forms of gaming, except for bingo and other sports betting. There was a significant relationship between monthly expenditure on VLTs and the combined monthly expenditures on other gaming activities excluding VLTs, explaining approximately 12 per cent of the variance for monthly VLT expenditures. Monthly expenditures on lottery draws and instant tickets are most strongly associated with monthly VLT expenditures.

#### Item 4.8

<b>Correlation Between Monthly Expenditures On VLT's And Other Gaming Activities</b>			
Monthly expenditure on ...	n	r	r <sup>2</sup>
Gaming activities excluding VLT's	669	.34**	.12
Combined lottery draws and instant tickets	669	.31**	.10
Draws only	669	.20**	.04
Instant tickets only	669	.29**	.08
Combined casino gaming	669	.29**	.08
Slot machines	669	.30**	.09
Table games	669	.12**	.02
Bingo	669	0.01	--
Other sports betting (including Pro-Line)	669	0.01	--
Other gaming	669	.14**	.02

The second correlation analysis was conducted with those who engaged in both VL play and the specific gaming activity being examined. The second correlation analysis confirmed the results noted previously, with stronger relationships observed for four of the gaming activities. The results confirm the hypothesis that those spending higher amounts on VLTs are also more likely to be spending higher amounts on other forms of gaming. Casino gaming is most strongly associated with monthly VLT expenditures, most notably on slot machines. Again, monthly expenditures for bingo and sports betting appear to be independent of monthly VLT expenditures among those playing these forms of gaming.

#### Conclusions

As hypothesized, there is a positive relationship between the amount spent on VLTs and other gaming expenditures. Essentially, as VLT expenditures increase, the amount spent collectively on gambling activities tends to also increase exponentially - largely due to the amount of money typically spent on VLTs each month.

It is noteworthy that expenditures on other gambling by Heavy VL Players, on average, are at least twice as high as noted for any other VL player segment ( \$120 versus \$40 - \$60), and exceeds Non-VL Players by a factor of five ( \$23). Also, Heavy VL Spenders allocate the majority (87 per cent)

of their gambling dollars to VL play, as compared to 50 per cent or less by other VL players.

Given the relationship between VLT and other gaming expenditures, the question arises whether gaming expenditures of VL players would be reduced or diverted if VLTs were not available. This question is pertinent given current controversies surrounding VLTs, and any consideration of elimination or reduction in the number of VLTs in the Province.

Focal Research found that, "the evidence of this current analysis suggests that, depending upon the level and extent of involvement in video lottery gambling, an increase in other gambling expenditures would be expected. Although it should be noted that, given the current strategies for other gaming options available in Nova Scotia, it is **highly unlikely** that diverted expenditures would reach the levels noted for video lottery."<sup>44</sup> Focal Research adopts this position largely due to the nature of video lottery play, which is more accessible, continuous, and unscheduled compared to other gaming activities. This also assumes that, in the absence of VLTs, VL players would not divert their gambling activities to an illegal market, perhaps comprising VLTs.

For all analyses, there was a positive association among expenditures on VLTs and all other gaming activities except bingo and, to a lesser extent, sports betting. The exceptions can be partly explained by the nature of the games, which are less accessible, can have betting caps, and are often played at specified times. Focal Research notes that if these or any other gaming activities were to become more accessible in a continuous gaming format, then the relationship with VL expenditures may be considerably strengthened. For example, the strong association between slot machines and VLTs is probably a reflection of the extent to which the games are alike.

## ***ENVIRONMENTAL IMPACTS***

As was the case in the previous reporting period, the environmental impacts of gaming in Nova Scotia are considered minimal. In assessing these impacts, the Authority reviewed the operations of casinos, bingos and bingo suppliers. There does not appear to be any appreciable difference in the level of automobile traffic, parking problems or noise levels at Nova Scotia's casinos. Both casinos continue to recycle when possible.

Nova Scotia's bingo suppliers report that the bingo paper which they supply to licensees is fully recyclable. The bingo paper, if recycled, could be used for cardboard boxes or lower grade paper. Bingo suppliers are also using the more environmentally friendly vegetable based inks in bingo markers.



## NOTES FOR CHAPTER 4

- 1 Nova Scotia Standing Committee on Community Services (1999). Socioeconomic Impact of Video Lottery Terminals.
- 2 MPM Gaming Research (1999). Convenience Gaming and Social Impacts in Nova Scotia.
- 3 Nova Scotia Standing Committee on Community Services (1999). Socioeconomic Impact of Video Lottery Terminals.
- 4 MPM Gaming Research (1999). Convenience Gaming and Social Impacts in Nova Scotia.
- 5 Cautionary note from Nova Scotia Alcohol and Gaming Authority.
- 6 MPM Gaming Research (1998). Interim Report: Towards a Convenience Model of Gaming and Its Social Effects in Nova Scotia.
- 7 Ibid.
- 8 Ibid.
- 9 MPM Gaming Research (1999). Convenience Gambling in Nova Scotia: A Study of Consumer Income and Expenditure Patterns.
- 10 Ibid.
- 11 Shaffer, H.J., and Hall, M.N, (1996). Estimating the prevalence of adolescent gambling disorders: a quantitative synthesis and guide toward standard gambling nomenclature. Journal of Gambling Studies, Vol. 12, pp. 193-214.
- 12 Omnifacts Research Limited (1993). An Examination of the Prevalence of Gambling in Nova Scotia.
- 13 Nova Scotia Department of Health and Dalhousie University (1996). Nova Scotia Student Drug Use 1996: Technical Report.

- 14 Lynam D., Milich R., Zimmerman R, Novak S, Logan T, Martin M., Leukfeld C, Clayton R, (1999). Project DARE: No Effects at 10-Year Follow Up. Journal of Consulting and Clinical Psychology. 67, 4, pp. 590-593.
- 15 Focal Research Consultants Limited (1998). 1997/98 Nova Scotia Video Lottery Players Survey.
- 16 Dickerson (1998). EGM Players and Responsible Gambling Paper. Presented at the National Association for Gambling Studies Conference for practitioners, Adelaide, November 1998.
- 17 Australia Productivity Commission (1999). Australia's Gambling Industries Draft Report Volume 1.
- 18 Focal Research Consultants Limited (1998). 1997/98 Nova Scotia Video Lottery Players Survey. p. X.
- 19 Ibid. p. XIX.
- 20 Ibid. p. XIX.
- 21 Ibid. p. XX.
- 22 Ibid. p. XXII.
- 23 Ibid. p. XXV.
- 24 Ibid. pp. 3-4.
- 25 Ibid. p. 12.
- 26 Ibid. pp. 3-4.
- 27 Dickerson, 1993; Thompson et al, 1996, Walker, 1992, as cited in MPM Gaming Research (1999). Review of the Porter Dillon Study: Socioeconomic Impact of Video Lottery Terminals. p. 14.
- 28 Ibid. p. 14.

- 29 Chambers, Kerry & Tracy Schrans (1998). Prevalence Studies – Moving Beyond the Numbers: a critical debate surrounding the conceptualization and measurement of problem gambling in Canada.
- 30 Australia Productivity Commission (1999). Australia's Gambling Industries Draft Report Volume 1. p. 6.2
- 31 Baseline Market Research Limited (1996). Final Report Prevalence Study on Problem Gambling in Nova Scotia.  
Baseline Market Research Limited (1997). Problem Gambling Follow-Up Study: Final Report and Case Studies.
- 32 Nova Scotia Standing Committee on Community Services (1999). Socioeconomic Impact of Video Lottery Terminals.
- 33 Ibid.
- 34 Ibid.
- 35 Ibid.
- 36 MPM Gaming Research (1999). Review of the Porter Dillon Study: Socioeconomic Impact of Video Lottery Terminals.
- 37 CANMAC Economics Limited (1997). Nova Scotia VLT's: An Economic Impact Statement.
- 38 Cyrenne, Philippe (1995). An Analysis of the Net Social Benefits From Legalized Gambling in the Province of Manitoba.
- 39 Thompson, William N., Ricardo Gazel and D. Rickman (1996). The Social Costs of Gambling in Wisconsin.
- 40 MPM Gaming Research (1999). Review of the Porter Dillon Study: Socioeconomic Impact of Video Lottery Terminals.
- 41 Ibid.

- 42 Sterling Research Incorporated (1998). A Survey of the Prevalence and Perceptions of Gaming in Nova Scotia.
- 43 Focal Research Consultants Limited (1998). 1997/98 Nova Scotia Video Lottery Players' Survey.
- 44 Ibid.



## GAMING ACTIVITY IN OTHER JURISDICTIONS

### INTRODUCTION

Section 56(1) of the *Gaming Control Act* directs the Nova Scotia Alcohol and Gaming Authority (the Authority) to:

**(c) carry on a continuous study of the operation and administration of casinos, other lottery schemes and gaming control laws in effect in other jurisdictions, including the Criminal Code (Canada), that may affect the operation and administration of casinos and lottery schemes in the Province.**

This year, the Authority has focused much attention on the increasing impact of computerized gaming and on investigative works into gambling undertaken by the governments of the United States and Australia. Thanks to the new global realities of computerized networking, it is increasingly difficult to assess the gaming industry within the confines of traditional jurisdictional boundaries. For this reason, this year's overview of gaming operations in other jurisdictions is grouped by gaming activity, not by nation.

As part of its ongoing commitment to providing data for cross-jurisdictional comparisons within Canada, the Authority is also including its fourth cross-jurisdictional review of lottery schemes and gaming control laws.

## **GAMBLING ON-LINE**

Like the rest of the world, people who like to wager are getting wired – and so are their suppliers. Not surprisingly, then, computer-based gaming is capturing the attention of players, and of regulators.

### **THE STOCK MARKET, DAY-TRADING**

This year the concept of gambling on the stock market took on increased prominence thanks to the practise of day-trading (the use of home or office computers to buy and sell stocks quickly). It has been estimated that one hundred million Americans own stocks and almost five million of them buy and sell on-line.<sup>1</sup>

Although it is difficult to know how many Nova Scotians are involved in day-trading or even on-line investing, Statistics Canada cited a report in February 1999 which said that more than 38 per cent of Canadian households had one or more members who used computer communications for banking, e-mail or the like in 1997, and that 29.4 per cent of households contained at least one regular user.<sup>2</sup> Given that higher rates of education increase computer use for such activities<sup>3</sup> and that Nova Scotia is home to 11 institutions of higher learning, it seems reasonable to conclude that at least some day-trading may indeed be taking place here.

So what is the correlation between investments and gambling? The Australian Productivity Commission, in its draft report on gambling industries, said that even risky investments can realistically be expected to offer a positive rate of return over time. "With a gambling product, the return may vary from time to time, but with enough transactions and over time, the expected rate of return for the gambler is negative."<sup>4</sup> As a business writer for The Associated Press explained:

**"The long-term rise of the stock market, supported by economic growth, is a powerful force benefitting people who keep their money invested over time in funds or individual stocks. Once you start buying in the morning and selling in the afternoon, you are no longer riding this current, but trying to catch individual waves one by one."**<sup>5</sup>

It would appear that, like some gamblers, some on-line traders have disproportionate perceptions of the odds of making large profits.

## **INTERNET CASINOS, BINGOS AND COMPETITIONS**

Sebastian Sinclair, a research consultant who testified before the National Gambling Impact Study Commission (the Gambling Impact Study) in the United States, estimated that Internet sport wagering, casino, lottery and bingo play more than doubled in the past year, with the number of gamblers increasing to 14.5 million from 6.9 million worldwide and revenues rising to \$651 million from \$300 million. Others think that revenues worldwide topped \$900 million in 1998.<sup>6</sup> Experts testifying before the Gambling Impact Study appeared to agree that because consumers are growing more comfortable at conducting other types of business transactions on-line, the Internet gaming business should continue to grow, making it a multi-billion-dollar undertaking by the turn of the century.

Bingo games, lotteries and casinos are not the only forms of wagering to be found on the Internet. Intranets and even e-mail are taking sports pools and other kinds of betting to new, electronic markets. The Gambling Impact Study noted its concern over on-line tournaments which it fears may act as a gambling gateway for youngsters. The tournaments at issue<sup>7</sup> involve regular video or computer games but require players to pay a registration or entrance fee, part of which is used for prizes.

Different nations are taking different approaches to Internet and on-line gambling (see regulation section below). In Canada, one offshoot of the business has been in software development. In addition to head offices of firms that operate on-line casinos from offshore servers, Canada is home to an estimated 15 on-line games' companies that are publicly traded.<sup>8</sup>

## **THE INTERACTIVE GAMING COUNCIL**

Canada is also the base of the Interactive Gaming Council, a coalition of 60 companies involved in on-line gambling. The council has developed a voluntary code of conduct and seal of approval programs for its members. These programs are designed to address such issues as truth in advertising



and prevention of underage gambling and to give players confidence in operators' integrity. This year, the council helped organize what it hopes will be an annual summit of interested on-line parties. It also developed a database system<sup>9</sup> to help its members pre-screen credit card users – an effort to help minimize bad debts for the firms and to help counter concerns over compulsive gambling.

## **WORLDWIDE REGULATION OF THE INTERNET**

On-line wagering brings with it unique concerns over game/operator integrity, client confidentiality, problem play and liability.

In June of 1998, for example, a California woman was sued by her bank after she tallied \$70,000 in Internet gambling debts on various credit cards. The woman countersued her bank and the credit card companies, alleging they should have stopped her from conducting the transactions because gambling is illegal in California and on-line gambling is prohibited throughout the United States. In July of 1999, MasterCard International announced it had set new regulations affecting the use of its cards for Internet wagering as part of an out-of-court settlement in the case. The rules, which are similar to ones already put in place by Visa, will require Internet casinos with merchant accounts to post Web notices stating that Internet gaming is illegal in certain jurisdictions. The on-line firms will also be required to ask potential clients where they live and keep a record of that information. Banks will be advised by encoded transaction data when wagers are being placed on MasterCard.

Meanwhile, Arizona State Senator John Kyl has drafted legislation that advocates prohibitions on most aspects of Internet gambling in the U.S. An earlier effort by Senator Kyl to ban Internet gambling in 1998 failed. His re-introduced legislation would update U.S. law to prohibit card games popular in cybercasinos and would ban electronic transmissions of bets. It received the approval of the Senate Judiciary Committee in June of 1999, at about the same time the Gambling Impact Study's final report was also recommending an outright ban.

Critics of the American endeavours argue that a blanket ban is technologically unenforceable and therefore doomed to fail. They favour

regulation that nets government fees and that could help credible Internet providers who protect consumers against scams, problem and/or underage gambling. Under Australia's draft regulation plan, for example, casino operators must register players (to help prevent gambling by minors), betting limits are set, and players are forbidden from wagering if they don't have funds on deposit in a casino account. Individual state governments, which are responsible for gaming, must opt into that national program. Worldwide, fees for the privilege of doing business vary from country to country, and in some places, like Antigua and Barbuda, depending upon the individual gaming activity to be conducted.<sup>10</sup> Some governments get more than revenue for the license privilege. In the Caribbean Island of Dominica, for example, application fees and operational fees are married with demands for local employment and donations to environmental, health and educational projects on the island.<sup>11</sup>

Such plans are not restricted, however, to offshore islands. In Canada, where all legal gaming falls under the parameters of the *Criminal Code*, Prince Edward Island is considering a proposal that would see it act as a base of operations for an Internet lottery. Legislators there have been asked by an environmental group to license an Earth Future Lottery, allowing them to operate a non-profit charitable cyberspace lottery from Montague, P.E.I.

## ***TRENDS AND ISSUES AROUND THE WORLD***

### **INTERNATIONAL RESEARCH PROJECTS**

Presented to the U.S. Congress in June of 1999, the final report of the National Gambling Impact Study Commission (the Gambling Impact Study) actually falls outside the parameters of this report's 1998/99 fiscal year. Likewise, the Productivity Commission's draft report on Australia's Gambling Industries was released in July of 1999, after this Annual Report's year-end of March 31. Given each document's analysis of existing research and assessments of the overall impacts of gambling, however, the Authority would be remiss if it did not take this opportunity to review and comment upon their findings.

## **National Gambling Impact Study Commission Final Report**

With a budget of \$5 million, the Gambling Impact Study was given a two-year mandate by U.S. President Bill Clinton to study the state of gambling in America. Politically charged from the outset by concerns that either gaming or right-wing lobby groups would influence the agenda, the Gambling Impact Study's final report found that gambling is big business and getting bigger (revenues from legal wagering have grown by 1,600 per cent);<sup>12</sup> that problem gamblers cost the economy billions of dollars<sup>13</sup> and determined that WorldWideWeb wagering should be banned in the U.S. The Gambling Impact Study also emphasized a matter long of concern to the Authority: a "dearth of impartial, objective research that the public and policymakers at federal, tribal, state and corporate levels need to shape public policies on the impacts of legal gambling."<sup>14</sup> The Gambling Impact Study tried to fill part of the void with research by the National Research Council and by the National Opinion Research Council at the University of Chicago and by setting parameters by which future studies may be undertaken.

## **Australia's Gambling Industries Draft Report**

An independent agency that reviews and advises its government on microeconomic policy and regulation, the Australia Productivity Commission has also expressed concerns over the nature of research in an industry it confirms is big business Down Under. In 1997/98, the study says, the nation's residents lost more than \$11 billion to wagering. This equates to an average of about \$800 per person over the age of 18, with 52 per cent of the total expenditure coming from VLTs (gaming machines outside casinos). Of the \$11.3 billion loss, the Productivity Commission's surveys and hearings determined that \$10.8 billion was by Australians, with the balance by overseas visitors.

While gambling was popular in general -- 82 per cent of adult Australians gambled in 1997/98 (apart from raffles or sweeps) -- just 10 per cent of gamblers accounted for the bulk (80 per cent) of expenditures. Although it determined that "no single existing test instrument is perfect for measuring the extent (prevalence) of problem gambling in the population,"<sup>15</sup> the Commission used several methodologies to ultimately

estimate that 2.3 per cent of Australia's adult population (330,000) have significant problems with gambling, with one per cent experiencing "severe" problems, that their annual losses average almost \$12,000, compared to \$625 for other gamblers, and that problem gambling is significantly greater in Australia than in a number of other countries.

Although the Productivity Commission was only preparing a draft report that is likely to be revised after further hearings, it has already said there is a need to focus on policies that are based on harm minimization including: more effective communication of the odds and probabilities of play, hardware and software methods of advising players of spending patterns, and improved regulation of various aspects of the industry.

### ***Comparing The Findings***

Unlike the U.S. Gambling Impact Study, the Productivity Commission did not include a list of recommendations per se in its draft report. It did, however, include itemized lists of key findings or key messages in most of its 21 chapters and in the executive summary. While some of the findings in each nation may be applicable only in that area, many of the principles, concerns and suggestions can or are being applied elsewhere. With this in mind, the Alcohol and Gaming Authority undertook an item by item comparison of Nova Scotia policies, laws and trends first with the Gambling Impact Study's 72 recommendations and then with the Commission's key findings/messages. (These item-by-item comparisons are reproduced in their entirety in Volume II of this Report.) Taking legislative differences between the jurisdictions into account, many of the measures cited in each of these international studies are already covered by the Nova Scotia *Gaming Control Act* and associated regulations or are being acted upon by the Authority or the Nova Scotia Gaming Corporation. Other recommendations have been identified by the Authority in previous Annual Reports as areas of concern or have been topics of regional research.<sup>16</sup>

The Alcohol and Gaming Authority also took particular note that some of its concerns were shared by the Productivity Commission and the Gambling Impact Study. During the course of its comparison, the Alcohol and Gaming Authority found cross-jurisdictional support for:

- ▶ an age of majority for all forms of gambling;
- ▶ the creation and implementation of advertising standards;
- ▶ the need to improve and broaden rules affecting self-exclusion;
- ▶ the need for all gaming providers to develop mission statements or policies on problem gambling;
- ▶ the need for further study and possible regulatory development regarding Internet wagering;
- ▶ further study and possible restriction of the use or location of credit card and cash machines in places where gaming is permitted;
- ▶ the better publication of the odds and probabilities of winning;
- ▶ the need for a central body to be responsible for research into gambling; and
- ▶ the need for independent handling of funding aimed at research and treatment programs aimed at problem gambling.

## CASINOS

In North America, perhaps the biggest news in casinos this past year was the continued trend toward large-scale American mergers as more casinos were swept under new corporate titles. Harrah's assumed ownership of Rio Hotel and Casino Inc.; MGM Grand acquired Primadonna Resorts, and Hilton took on Grand Casinos. This all occurred before Park Place Entertainment Corporation (Hilton's newly named spinoff division for gaming, which also is home to Bally's Casinos) bought the gaming division of Starwood Lodging. That buyout, which is expected to be finalized in November 1999, means that brand kingpin Caesars Casinos as well as most Sheraton properties (including the two operated in Nova Scotia) will now fall under the corporate umbrella of Park Place.<sup>17</sup> If these megafirms keep their debt ratios in check, a small number of large firms will have easy access to financing, making their positions difficult for smaller companies to competitively challenge.

North America was not alone in this trend toward megafirms. In France, large groups are acquiring smaller one-or two-property firms at a rapid rate and in Portugal two groups now have control of six of the nation's eight casinos.<sup>18</sup> In Austria, where all of the nation's 12 casinos are under the

Casinos Austria monopoly, the operator is targeting foreign rather than domestic growth, now being active in 10 countries on four continents.<sup>19</sup>

Nor were casino owners the only ones amalgamating. Slot manufacturers were also buying up each others' properties,<sup>20</sup> and casino owners were beginning to acquire the economies of scale they needed to eye the potential of that market, too. Park Place Entertainment Corporation has expressed interest in developing proprietary slot and video games for use on its properties.<sup>21</sup> By the summer of 1999 it was already test marketing a slot version of a popular America Online (AOL) game Slingo, a slot-bingo style product.<sup>22</sup> The company would reportedly amortize its research and development costs by seeking approval from various jurisdictions to feature the brand named video and slot-style games which would actually be produced by traditional manufacturers.<sup>23</sup>

Park Place's tentative steps toward game development comes at a time when the general trend appears to be taking a toll on traditional, three-reel games. Video, coinless and nickel slots continued this year to emphasize increased interactivity and more entertainment value for play time. Video reels also helped repopularize nickel games, which are expected to come to Nova Scotia's casinos soon.<sup>24</sup> By allowing 25, 45, 90 or even 200 coins to be wagered at a time, the nickel slots take as much of a gambler's money in one roll as some dollar machines, earning operators comparable returns to the more traditional lever and reel machines.<sup>25</sup> Indeed, from September 1997 to September 1998, Nevada's 1,500 nickel slots earned \$701 million for casinos, nearly 9 per cent of total win, according to the state Gaming Control Board.<sup>26</sup>

## **BINGOS**

The once traditional game of bingo is stepping into the computer age with linked bingos, progressives and electronic play of other sorts taking a larger share. In Europe, GameScape's BingoVision, for example, is now found in Estonia, Lithuania, Slovakia, New Zealand, Belgium and Germany.<sup>27</sup> In addition to players at home, who buy their tickets at normal lottery outlets and follow the game via television, BingoVision features a TV game-show component. By dividing a studio audience into teams and selecting people to play for prizes on behalf of those teams, the TV show adds the colour

and entertainment required to attract game show audiences. Computer technology also heightens suspense; operators advise the home audience how many other players are within striking distance of a win as the game nears its climax. Like linked bingos, which use electronics to tie together gaming halls in far flung places for combined and sometimes progressive wins, the TV-style electronic bingo is aimed at attracting a younger, computer-comfortable player. The efforts appear to be working. BingoVision sales account for more than 85 per cent of the on-line market in Lithuania, 75 per cent in Estonia, 14 per cent in Slovakia, 8 per cent in both New Zealand and Germany and 5 per cent in Belgium.<sup>28</sup> Prizes in the Ontario Lottery Corporation's linked Superstar Bingo progressive activity meanwhile have topped out at \$640,536 for a progressive pot.

## LOTTERIES

Big prizes and electronics also helped traditional lotteries rebound worldwide in 1998, after a business decline in 1997. Overall sales in 1998 neared \$125 billion, up more than 4 per cent over 1997's \$119 billion. Five countries topped \$9 billion:

- ▶ the U.S. (\$36.7 billion);
- ▶ Italy (\$12.3 billion);
- ▶ United Kingdom (\$9.9 billion); and
- ▶ Spain (\$9.7 billion) and; Germany (\$9.4 billion).

Canada finished in the top 10, with lottery sales of \$5.1 billion placing it in eighth place.<sup>29</sup>

The United States' sixth annual National Gaming Survey, conducted in the summer of 1998, showed that more Americans played the lottery (70 per cent) than any other form of legalized gaming and that 25 per cent play at least once a week.<sup>30</sup> Multi-state games like Powerball tapped into consumers' desire for big prizes. Jackpots that topped \$295 million sometimes spurred on other ticket sales, other times led to what some state lottery officials said were false expectations of big money.<sup>31</sup>

The U.S. state lotteries were not the first to link their fortunes in the interest of economies of scale and/or big prizes. Lottery operators in Denmark,



Finland, Iceland, Norway and Sweden began Viking Lotto in the early 1990s and are now having mixed results: Norway's sales increased 27 per cent on Viking Lotto in 1998 while sales in Sweden went down 3 per cent. Even the associations representing lotteries were seeing strength in the size that mergers provided. In May 1999, the European Association of State Lotteries and Lottos combined with the European section of Intertoto to form the European State Lotteries and Toto Association, otherwise to be known as European Lotteries. In all, the European Lotteries umbrella covers 75 lotteries and 40 separate jurisdictions in Europe.<sup>32</sup>

The Powerball phenomenon in the U.S. had other fallouts. When the jackpot hit \$195 million in May 1998 and \$295.7 million in July 1998, Hoosier Lottery of Indiana replaced its promotional TV and newspaper ads with ones reminding people that the odds of winning were 80 million to one. Some other state lotteries also use responsible play messages whenever jackpots hit a certain level.<sup>33</sup> Still, the Gambling Impact Study harshly criticized lotteries for aggressive advertising and marketing approaches, setting a tone for expected change.

Lottery operators are also pressing the buttons on an electronic future. A recent magazine article noted 45 separate Web sites for lotteries outside North America.<sup>34</sup>

North American lottery operators are also eyeing the future. In Prince Edward Island, for example, talk of a cybersite (as mentioned earlier) is based on an environmental group's request for a licensing arrangement that will allow it to operate an Internet lottery for its charitable cause.

Loto-Quebec, however, is testing an on-line idea of another kind, selling CD-ROMs at local ticket outlets.<sup>35</sup> After using the CD once, a player would go to the local retailer to get a new scratch ticket number or identifier code to allow access to a new interactive game. In Switzerland, lottery operators have also opted for an electronic style of instant ticket that is sold via special terminals in cafes and restaurants. Unlike the CD, the Swiss electronic tickets reportedly represent the same games and graphics as their existing paper equivalents.<sup>36</sup>



## ELECTRONIC GAMING MACHINES

Electronic gaming machines continue to be the subject of concern. In its final report, the Gambling Impact Study observed that non-casino-based gaming devices “do not create a concentration of good quality jobs and do not generate significant economic development.”<sup>37</sup> Skeptics may wonder if that observation wasn’t at least partly the working of vocal casino industry and labour representatives on the study’s commission. Still, public concern over neighbourhood wagering machines appears common.<sup>38</sup> Efforts to oust the machines, however, have had mixed results.

### Alberta VLT Plebiscite

During municipal elections in October of 1998, 36 municipalities polled public sentiment on the issue of Video Lottery Terminals (VLTs). In all but five municipalities that held votes, a majority voted against propositions that called for bans of the VLTs. Tallies indicate that 310,405 Albertans voted to let the VLTs remain while 254,947 voted that the machines be ousted from their communities. But that was not the end of the matter. In a decision released early in March 1999, Court of Queen’s Bench Justice Doreen Sulyma ruled that the Alberta Gaming and Liquor Commission had exceeded its jurisdiction in trying to remove VLTs from communities that had voted in favour during plebiscites.<sup>39</sup> Madame Justice Sulyma found “no evidence that the Commission considered any matter other than the government policy announcement and plebiscite results or that it independently considered its right to terminate”<sup>40</sup> its contracts with VLT retailers.

**“The record demonstrates that the Commission had no independent policy respecting the removal of VLTs from communities based on municipal plebiscites. Rather...it has blindly followed the directions and policy statements of the Cabinet.”<sup>41</sup>**

The judge essentially recalled the recall, further prohibiting the Commission from terminating any retailers’ VLT agreements as a result of:

- ▶ directions from the Minister in charge of lotteries or any other Minister or officers of the Crown;
- ▶ a request from any municipality;

- ▶ the results of non-binding plebiscite or;
- ▶ any combination of the above.<sup>42</sup>

### **Louisiana Pulls The Plug**

After years of legal wrangling and petitions, the results of a 1996 referendum in Louisiana were acted upon at the end of June 1999 when 4,897 of the state's video poker machines were simultaneously turned off in a total of 33 parishes across the state.<sup>43</sup> The appeals, however, continue.

Even as some communities try to ban the machines, their ongoing popularity cannot be disputed. During 1997/98, the major form of gambling undertaken in Australia was at poker or gaming machines.<sup>44</sup> Indeed, electronic gambling accounted for more than 50 per cent of an industry that reportedly represented a loss of \$790 per adult in that nation.<sup>45</sup> In Denmark, meanwhile, the state-run monopoly Danske Tipstjinst is calling for the introduction of as many as 5,000 new VLTs on street corners, railway and bus stations, and in liquor-serving premises.<sup>46</sup>

In Europe, the video lottery market is still in what one industry magazine called "embryonic" stages.<sup>47</sup> In some places, like Iceland, the electronic devices' revenues are directly tied to certain causes (the University of Iceland) while in others, like Sweden, attempts to mitigate potential problem gambling keep wager limits and prizes low.<sup>48</sup>

Like their sister slot machines in casinos, electronic gaming machines are expected to undergo rapid structural changes as interactive gaming takes a larger place in the mainstream. The question will be whether manufacturers will find electronic ways of quieting critics' concerns over their role in problem gambling while still making the games entertaining for customers and lucrative enough to satisfy operators/owners.

## OFFICE AND BETTING POOLS

Games of chance go well beyond licensed lotteries and casinos, however, and often include activities society fails to recognize as parts (some legal, some not) of the gaming mix. Few topics, for example, are beyond the average office betting pool's reach. The time at which a naval vessel will cross a certain point in its oceanic voyage, the delivery date of a baby or the results of an election -- all could be the subject of co-workers' wagering. Sports pools are such a part of the norm that newspapers feature Las Vegas odds for pro games in their regular sports coverage. In Nova Scotia, 19 per cent of the residents contacted in a random survey in 1998<sup>49</sup> reported participating in sports and office pools; more than the number who stated they played bingo (17 per cent), VLTs (15 per cent) or gambled at the Sydney Casino (18 per cent). As the U.S. Gambling Impact Study noted in its final report, office and sports pools are easy to participate in, widely accepted, and probably the least likely to be prosecuted form of illegal gambling.<sup>50</sup>

The Gambling Impact Study argued the need for better enforcement of rules forbidding this form of betting, saying studies show sports wagering can introduce youngsters to gambling. Still, a Massachusetts Department of Public Health survey in 1997 showed that 21.6 per cent of respondents randomly selected from students in grades 7 through 12 had bet on sports during the 30 days prior to the survey.<sup>51</sup> The Gambling impact Study said sports betting on college campuses becomes further complicated when athletes themselves are "tempted to bet on contests in which they participate, undermining the integrity of sporting contests."<sup>52</sup> It cited a 1999 University of Michigan survey that showed more than 45 per cent of male collegiate football and basketball athletes had admitted to betting on sporting events, despite rules forbidding it. "More than 5 per cent of male student-athletes provided inside information for gambling purposes, bet on a game in which they participated or accepted money for performing poorly in a game."<sup>53</sup>

## **CROSS-CANADA GAMING SYNOPSIS**

Provincial governments are empowered under Section 207 of the *Criminal Code* to conduct and manage lottery schemes in their jurisdictions. Further, provincial governments are empowered under this section to act as licensing authorities for various other lottery schemes that are conducted within their provinces. While all provinces receive this licensing authority from the *Criminal Code*, the manner in which lottery schemes are administered varies from one province to the next.

Each year, the Authority reviews the administration of gaming activities in jurisdictions across the country and prepares for this Annual Report a brief description outlining the various regimes. As part of this cross-Canada process, each jurisdiction is asked to provide information regarding the following aspects of gaming in their area:

- ▶ agencies involved;
- ▶ enabling legislation;
- ▶ charitable licensing
- ▶ specific gaming activities
- ▶ First Nations gaming, and
- ▶ other important gaming developments.

The annual synopsis provides a comprehensive overview of the diverse gaming activities, administrative and regulatory processes in use across Canada. This synopsis has been adopted by the Canadian Gaming Regulators' Association as a resource guide to gaming activity in Canada.

### **BRITISH COLUMBIA**

#### **Agencies Involved**

##### ***Gaming Policy Secretariat:***

- ▶ A division of the Ministry of Employment and Investment;
- ▶ Established in April 1998 to oversee the implementation of the Province's new gaming policies;
- ▶ Coordinates policy and operational issues between the various

- government gaming agencies; and
- ▶ Advises the Minister on gaming policy, procedure and implementation issues.

***British Columbia Gaming Commission:***

- ▶ Previously established under a provincial Order-in-Council, the Commission's authority has been retroactively entrenched under the Provincial Lottery Act;
- ▶ Licenses charitable and religious organizations to conduct and manage gaming events under section 207(1)(b) of the Criminal Code;
- ▶ Develops terms and conditions applicable to charitable gaming licensees;
- ▶ Develops and promulgates regulations regarding fees for charitable gaming;
- ▶ Administers Direct Charitable Access to Gaming Revenue program (grants);
- ▶ Operates compliance program to ensure terms and conditions are satisfied;
- ▶ Licenses gaming activities at fairs and exhibitions under section 207(1)(c) of the Criminal Code;
- ▶ Licenses lottery schemes at public places of amusement under section 207(1)(d); and
- ▶ Licensed and regulated casino table games in British Columbia until June 1, 1998.

***British Columbia Lottery Corporation:***

- ▶ Incorporated in October 1984 and is continued under the Lottery Corporation Act of British Columbia (1985). Prior to 1985, the Province of British Columbia was a partner in the Western Canada Lottery Foundation.
- ▶ Authority under section 207(1)(a) of the Criminal Code and the Lottery Corporation Act to conduct and manage lottery schemes within BC, including marketing of nationwide and regional lottery games in association with other provinces of Canada.
- ▶ Designated by government as its agent to conduct and manage all electronic gaming, including electronic (Starship) and linked (SuperStar) and hand-held bingo.

- ▶ Conducts and manages casino gaming, including table games and slot machines under the conduct and management provisions [section 207(1)(a)] of the Criminal Code and the Lottery Corporation Act.

***British Columbia Racing Commission:***

- ▶ Established in 1960 by the provincial government to govern, direct, control and regulate horse racing;
- ▶ Responsible for ensuring a high standard of integrity in Standardbred and Thoroughbred racing thereby maintaining the confidence of the betting public in the industry;
- ▶ Regulates horse racing under the Horse Racing Act and the Rules of Racing for each sector;
- ▶ Regulates and approves live horse racing dates at seven race tracks across the province in Vancouver, Surrey, Sidney, Osoyoos, Kamloops, Vernon and Princeton;
- ▶ The commission also hears appeals on the ruling of judges and stewards against licensees found in violation of the rules and regulations;
- ▶ regulates teletheatre betting according to the Theatre Betting Rules (1994);
- ▶ administers the Horse Racing Improvement Fund which provides awards to breeders and owners of horses as well as purse supplements according to formula agreements with each industry sector; and
- ▶ administers the Horse Racing Improvement Fund according to the Horse Racing Tax Act and the Horse Racing Tax Act Regulations.

***Gaming Audit and Investigation Office:***

- ▶ Division of the Ministry of Attorney General;
- ▶ Mandate is to ensure that gaming in the province is conducted honestly and free from criminal and corruptive elements;
- ▶ Established in November 1995 under a separation concept and is, therefore, independent of the government agencies (BCGC, BCLC) responsible for the issuing of gaming licenses and/or conduct and management of gaming operations;
- ▶ Responsible for registration of gaming industry operatives including staff, management and owners;
- ▶ Investigates any occurrence which may be of a criminal nature or

- bring lawful gaming into disrepute; and
- ▶ conducts audits of gaming operations and organizations against standards established by provincial legislation and policy.

#### ***Adult Addiction Services:***

- ▶ Division of Ministry for Children and Families;
- ▶ Program implemented in fall of 1997;
- ▶ Mandate to provide problem gambling counselling services across British Columbia;
- ▶ Program is delivered through existing alcohol and drug network of services;
- ▶ Public awareness includes posters, brochures and stickers distributed to gaming venues;
- ▶ Toll free Help Line available for crises management information and referral;
- ▶ Responsible for training of counsellors and gaming industry staff; and

Evaluation of program due March 2000.

#### **Charitable Licensing**

The following 11 categories of charitable or religious organizations are eligible for licensed charitable access:

- ▶ relief to disadvantaged distressed, and of poverty;
- ▶ advancement of education;
- ▶ advancement of religion;
- ▶ advancement of culture and arts;
- ▶ amateur athletic sports;
- ▶ enhancement of public safety;
- ▶ enhancement of public/community facilities (improvements to public areas or maintenance of community non-profit facilities);
- ▶ advancement of public health in the community (public health care and related services);
- ▶ conservation of the environment;
- ▶ enhancement of youth (support of your programs that enhance human development, civic responsibility, and pride in the community); and,

- ▶ community service organizations (to the extent that they donate to approved charity or religious organizations for approved charitable or religious purposes).

## **Specific Activities**

The following gaming activities are permitted in British Columbia:

- ▶ paper, electronic and linked bingo;
- ▶ social occasion casinos;
- ▶ raffles;
- ▶ pari-mutuel horse racing (including live, intertrack, teletheatre and simulcast wagering);
- ▶ casino gaming (including table games and slot machines); and lottery schemes including Lotto 6/49, Super 7, BC/49, Scratch & Win, Extra, Sports Action, Club Keno, Break-open, Special Event and Daily 3.

### ***Bingo***

- ▶ Paper bingos are licensed and regulated by the BC Gaming Commission.
- ▶ Electronic (Starship) and linked (SuperStar) bingos are conducted, managed and operated by the BC Lottery Corporation under section 207(1)(a) of the Criminal Code and the Lottery Corporation Act.
- ▶ In 1998/99, 2,263 charities were licensed to conduct and manage bingo events in 41 commercial bingo halls and 40 independent bingo halls. Many of these halls participate in SuperStar bingo.
- ▶ Games played include traditional bingo, progressive games, merchandise prizes, and bonus games (e.g., Loonie Pot). Promotional couponing and "All you can play" discounting were introduced in 1999.
- ▶ In 1998/99 there were 300 Independent Bingo licenses in British Columbia for play in smaller venues that do not necessarily have bingo as a primary focus (i.e., church halls, community centres). Many of these licensees subscribe to linked (SuperStar) games in the evening.
- ▶ Electronic bingo, which is played in parallel with paper games, is now operated in eight bingo halls. Five halls were added in



1998/99. All electronic bingo is run by the BC Lottery Corporation under section 207(1)(a) of the Criminal Code and the Lottery Corporation Act. Fixed terminals are presently being used.

- ▶ Hand held bingo unit trials have occurred under section 207(1)(a) and are being offered by the BC Lottery Corporation, although there are no permanent installations at this time.
- ▶ Television bingo is played in a limited number of small communities, but a moratorium on licenses was imposed several years ago.
- ▶ There is one long-established operation in which three licensees play jointly through a closed circuit cable TV hookup.

### **Regulatory Requirements**

- ▶ Maximum of five bingo events per day with no limit on the number of games that may be played per event (event length is controlled by licensed time).
- ▶ Maximum prize of \$1,000 per game and \$7,500 per progressive game; however, bonus games played with bingo games have no limit; no maximum prize limit per event.
- ▶ No maximum authorized amount for expenses as both the prize payout and the minimum return to charities are regulated.
- ▶ The minimum rate of return to charitable organizations is set at 25 per cent unless otherwise authorized by the Gaming Commission, which may allow variances for halls experiencing financial difficulty. Effective April 1, 1998, a facility-level guarantee was introduced for bingo licensees.
- ▶ The prize board is set at 50 to 65 per cent per event for bingo halls and 50 to 70 per cent per event for independent bingos.
- ▶ Charitable licensees conducting bingo events outside of bingo halls (Independent Bingos) are restricted to a maximum of 52 events per year.
- ▶ The minimum gaming age is 19 years of age or older.
- ▶ The license fee on bingo revenues was removed July 1, 1998.

### **Raffles**

- ▶ Charitable ticket raffles are regulated by the BC Gaming Commission in a manner consistent with section 207(1)(b).
- ▶ In 1998/99, 605 "A" licence ticket raffles were issued by the BC Gaming Commission. Of these, 47 were for "mega raffles", i.e.,

those in which the prize value is over \$50,000 or tickets are valued at \$100 or more.

- ▶ There are no government-run charitable ticket lotteries in British Columbia.

#### **Regulatory Requirements**

- ▶ There are no maximum prize values set for ticket raffles. However, prizes must constitute a minimum of 20 per cent of gross revenue.
- ▶ There is no maximum authorized amount for expenses although commissions for ticket sellers are restricted to 10 per cent of ticket prices.
- ▶ The minimum rate of return to charitable organizations is 30 per cent of gross revenue.
- ▶ The license fee for charitable ticket raffles was removed in April 1999.

#### **Casinos**

- ▶ Effective June 1, 1998 all casinos in British Columbia (apart from social occasion casinos and those operated by fairs and exhibitions) are conducted, managed and operated by the BC Lottery Corporation in a manner consistent with section 207(1)(a) of the Criminal Code and the Lottery Corporation Act.
- ▶ Casinos at fairs and exhibitions remain the responsibility of the BC Gaming Commission under the Lottery Act.
- ▶ There are currently 16 community casinos operating in British Columbia.
- ▶ Charitable and religious organizations can access gaming revenue generated at community casinos through a Direct Access program administered by the BC Gaming Commission.
- ▶ Host local governments receive 10 per cent of the net income from community casinos and 1/6<sup>th</sup> net income from destination casinos. The government recently granted final approval for two destination casino proposals through an RFP process. A further six approvals-in-principle for destination casinos are currently being negotiated.
- ▶ Both community and destination casinos are restricted to a maximum of 30 table games and 300 slot machines per casino.

Currently, there are 1,875 slot machines in operation in eight of British Columbia's 16 casinos. All destination casinos, when operational, will feature both table games and slot machines.

- ▶ BC Lottery Corporation contracts with service providers for casino operational services.

### ***Video Lottery Terminals***

- ▶ Video Lottery Terminals are prohibited in British Columbia.

### ***Horse Racing***

- ▶ The Horse Racing Act establishes the British Columbia Racing Commission (BCRC) and authorizes the Commission to licence race tracks, operators and personnel. The Horse Racing Tax Act provides for the licence fees and taxes on pari-mutuel wagering.
- ▶ The Canadian Pari-Mutuel Agency (CPMA) is responsible for compliance with and enforcement of section 204 of the Criminal Code. The agency sets out processes and procedures, provides funding for drug control administered by the BCRC, photo finish and video taping of races.
- ▶ The horse racing sector consists of seven race tracks and 25 teletheatres (26 approved).
- ▶ Of the seven race tracks, Fraser Downs and SanDown are privately owned, Hastings Park is operated by a non-profit Society and the four Interior tracks are operated by volunteer associations.
- ▶ A total of 270 live racing events and 711 simulcast horse racing events occurred in 1998.
- ▶ There were 133 live thoroughbred racing events and 137 live standardbred racing events.
- ▶ Hastings Park accounted for approximately 99 per cent of thoroughbred racing and Fraser Downs accounted for approximately 97 per cent of standardbred racing.
- ▶ Of the total \$221.6 million wagered in 1998, approximately 77 per cent was returned to the public in the form of winnings. Of the remainder, \$11.2 million flowed back to the sector, \$4.3 million to the Province, \$1.8 million to the Federal Government and \$34.6 million to track operations.
- ▶ Of the \$221.6 million wagered, 51 per cent was bet at horse race tracks and 49 per cent was bet via simulcast.

- ▶ Of the \$221.6 million wagered, 68.4 per cent (\$151.6 million) was wagered on British Columbia racing events.
- ▶ Thoroughbred horse racing accounts for approximately 68.2 per cent (\$103 million) of the total handle wagered on British Columbia racing events.
- ▶ Standardbred horse racing accounts for approximately 31 per cent (\$48 million) of the total wagered on British Columbia racing events.

### ***Lottery Schemes***

- ▶ British Columbia Lottery Corporation is responsible for the conduct and management of lottery schemes within British Columbia and cooperates with other provinces in the conduct and marketing of nationwide games.
- ▶ BC Lottery Corporation offers BC-only lotteries, BC/49, Extra, Club Keno, Daily 3, Sports Action, Scratch & Win and Break-open. Nationwide lotteries include 6/49, Super 7, and Special Event lotteries, such as Mega Millions 2000.
- ▶ The Corporation's products are available through a network of 2,400 Lottery Ticket Centre (LTC) retailers and 700 Club Keno Korner (CKK's).
- ▶ Breakopen is available in licensed adult social settings, such as pubs. Club Keno is offered in some adult social settings (CKK's) and through the LTC network.
- ▶ BC residents may purchase BC/49, Extra and 6/49 by Lotto Valet subscription. Subscription is available from BC Lottery Corporation for 26, 52 and 104 draws.
- ▶ Of British Columbia Lottery Corporation's \$1.26 billion in 1998/99 sales, \$910.7 million was realized from lotteries.
- ▶ Prizes paid in 1998/99 totaled \$508 million.

### ***First Nations Gaming***

- ▶ British Columbia government policy is that First Nations face the same restrictions and rules as all other gaming operators in the Province.

- ▶ First Nations gaming opportunities are identical to those available to all British Columbians.

## **ALBERTA**

### **Agencies Involved**

- ▶ Alberta Gaming and Liquor Commission (AGLC).

### **Charitable Licensing**

- ▶ Charitable or religious organizations, or an "Agricultural Fair or Exhibition."

### **Specific Gaming Activities**

- ▶ Enabling legislation: Alberta Gaming and Liquor Act; Alberta Gaming and Liquor Regulations; Bingo Terms & Conditions and Operating Guidelines; Raffle Terms & Conditions, and Pull Ticket Terms & Conditions; Casino Terms & Conditions and Operating Guidelines; and Video Retailer Agreement.

#### ***Bingo***

- ▶ Number of Bingo Associations is 64;
- ▶ Number of charity licenses in Bingo Associations is 3,534 per year;
- ▶ Number of charities in non-associations is 358 per year;
- ▶ Maximum prize value per event is \$15,000;
- ▶ Maximum authorized amount for expense is 10 per cent of gross revenue;
- ▶ Minimum rate of return is nil, the average is 17.2 per cent;
- ▶ Maximum events per day is two per facility; and
- ▶ Games played include: traditional, go-go series, media events, linked satellite events, and loonie pots.

#### ***Raffles***

- ▶ Number of charitable licenses with raffles over \$10,000 is 373 per year (note: raffles under \$10,000 in total sales are issued by private licensing agencies);
- ▶ Number of Break-open charitable licensees is 672; and
- ▶ Government-run ticket lotteries are operated in conjunction with Western Canada Lottery Corporation (Lotto 649, The Plus, Super

7, Extra, POGO, Pick 3, Pro Line, Over/Under, Points Spread, instant tickets).

### ***Casinos***

- ▶ Number of charitable casinos is 17;
- ▶ Number of table games at major casinos is 16 or more;
- ▶ Number of table games at minor casinos is 15 games or less;
- ▶ There is no limit on slot machines (number determined by usage);
- ▶ Age limit is 18 years;
- ▶ Only approved games may be used;
- ▶ Maximum bet \$500 per betting square;
- ▶ Paid employees must be registered with AGLC;
- ▶ Casinos in conjunction with agricultural fairs and exhibitions may operate maximum of 16 consecutive hours;
- ▶ Open seven days a week;
- ▶ Gaming equipment must be approved by AGLC;
- ▶ Gaming equipment suppliers must be registered with AGLC;
- ▶ All casinos must be closed on Christmas day;
- ▶ Liquor authorized on gaming floor; and
- ▶ Facilities must be constructed to AGLC security standards.

### **Hours Of Operation**

- ▶ Table games - 14 hours between 10 a.m. and 2 a.m.
- ▶ Slot machines - 17 hours between 10 a.m. and 2 a.m.
- ▶ Poker with same chips as casino - 14 hours between 10 a.m. and 2 a.m.
- ▶ Poker with separate chips and poker room inside the casino - 17 hours between 10 a.m. and 2 a.m.
- ▶ Poker with separate chips and separate poker rooms which can be secured from the casino when the casino is closed - flexible hours.

### ***Video Lottery Terminals***

- ▶ Number of VLTs in effect on May 23, 1999, was 5,965;
- ▶ Maximum authorized by government was 6,000;
- ▶ Licensee retains 15 per cent of net sales;
- ▶ AGLC receives 85 percent of net sales;
- ▶ Located only in liquor Class A minors-prohibited premises (age restriction - 18 years);

- ▶ Licensee can not extend credit on credit cards; and
- ▶ Hours of operation - 7 days a week (excluding Christmas day) 10 a.m. to 3 a.m.

### ***First Nations Gaming***

- ▶ First Nations have bingo events and can conduct a maximum of two events per day.
- ▶ No First Nations have casino facilities. The AGLC has received some preliminary inquiries but no applications are complete.
- ▶ Gaming activities authorized include casinos, bingos, raffles, pull tickets, and VLTs.
- ▶ First Nations must comply with Gaming and Liquor Act, Gaming and Liquor Regulations, and respective Terms & Conditions and Operating Procedures.
- ▶ Regulating agencies include Alberta Gaming & Liquor Commission and police agencies.



## **SASKATCHEWAN**

### **Agencies Involved**

- ▶ Saskatchewan Liquor and Gaming Authority (SLGA); and
- ▶ Saskatchewan Indian Gaming Licensing Inc.

### **Charitable Licensing**

- ▶ Organizations dedicated to:
  - ▶ relief of poverty;
  - ▶ advancement of education;
  - ▶ advancement of religion;
  - ▶ advancement of other community objects or purposes; and
  - ▶ cultural groups, educational organizations, minor sports leagues or teams, recreation facilities, religious organizations, community organizations, service clubs, and any organization that benefits the community as a whole.

### **Specific Gaming Activities**

- ▶ Enabling legislation includes: The Saskatchewan Alcohol and Gaming Regulation Act; The Gaming Licensing Regulations; Bingo Terms and Conditions; Raffle Terms and Conditions; Break-open Terms and Conditions; The Saskatchewan Gaming Corporation Act; The Saskatchewan Gaming Corporation Casino Regulations; Terms and Conditions for Saskatchewan Exhibition Casinos; and Terms and conditions for Saskatchewan Indian Gaming Authority Casinos.

### ***Bingo***

- ▶ In the 1998/99 fiscal year, 4,610 gaming licenses were issued;
- ▶ 1,619 bingo licenses with prize value over \$1,000;
- ▶ 341 small bingos with prize value under \$1,000;
- ▶ 34 Association Halls are licensed;
- ▶ The types of bingo games played include traditional and television/media bingo;
- ▶ Maximum prize value per month not to exceed 70 per cent of the gross spend;
- ▶ Maximum expenses not to exceed 17 per cent of gross; and

- ▶ Minimum to charity of 20 per cent of gross spend.

### ***Raffles/Breakopen Tickets***

- ▶ There were 1,544 Breakopen charitable licensees for the year 1998/99.
- ▶ There were 670 charitable licensees with raffle prize values over \$1,000 for the year 1998/99.
- ▶ There were 739 charitable licensees with raffle prize values under \$1,000 for the year 1998/99.
- ▶ Currently, SLGA has contracted a single supplier for the distribution of break-open tickets in the Province, and all tickets must be approved by SLGA.

### ***Casinos***

- ▶ Exhibition casinos include the full-time Emerald Casino (Saskatoon) and Golden Nugget Casino (Moose Jaw) at four days a week. Special event licences are available.
- ▶ Casino Regina is a government operated casino with 620 slot machines.
- ▶ The minimum age restriction is 19 years.
- ▶ Wagering limits for table games are requested by each licensee and approved by SLGA.
- ▶ Currently approved betting limits – blackjack \$1 to \$500;
- ▶ Currently approved betting limits – poker \$1 to \$200; and
- ▶ Currently approved betting limits – roulette \$.25 to \$6,000.
- ▶ See also “First Nations Gaming.”

### ***Video Lottery Terminals***

- ▶ As of March 31, 1999, there were 619 hotel beverage rooms and cocktail lounges in which VLTs are installed, for a total of 3,533 terminals;
- ▶ 85 per cent of the profit from VLTs goes to the government and 15 per cent to the site contractor;
- ▶ Minimum age restriction of 19 years; and
- ▶ VLTs are restricted to liquor permitted premises.

### ***First Nations Gaming***

- ▶ All First Nations gaming is encompassed under the following agreements: February 10, 1995, Casino Development Framework

Agreement – Province/FSIN; Casino Operating Agreement – SLGA/Saskatchewan Indian Gaming Authority (SIGA); Slot Machine Management Agreement – SLGA/SIGA.

- ▶ The SIGA is permitted to operate 620 slot machines at four casino sites.
- ▶ The agencies charged with regulating First Nations gaming include the SLGA, and the Saskatchewan Indian Gaming Licensing Inc.

### ***Horse Racing***

- ▶ The Authority is continuing to work with the Minister's Horse Racing and Breeding Advisory Board on Horse Racing matters in order to determine a possible business plan to help stabilize the industry.

### ***Gaming Policy Review Committee***

- ▶ The Authority chairs an ongoing process which examines issues such as the impact of gaming expansion on traditional beneficiaries, measuring the social impacts of gaming, community opposition to VLTs, and the distribution of gaming revenue.

### ***Internet Gaming***

- ▶ The Criminal Code of Canada, the federal legislation governing gaming, does not provide for the licensing of Internet gaming. Consequently, this form of gaming cannot currently be licensed. The Code does provide that any form of gaming which takes place utilizing computers, which would encompass Internet gaming, must be conducted and managed by the government.
- ▶ In recent years there have been numerous discussions with no clear position having been taken by the Federal Government or by any of the provinces, as it relates to the management of Internet gaming. It is apparent that the issue of Internet gaming is a complex and relatively new issue which has yet to be addressed in a comprehensive, definitive manner. It continues to be a major topic of discussion at many conferences and meetings.

### ***Other related information***

- ▶ In the United States, legislation identified as the Kyl Bill, seeks to prohibit Internet gaming outright. While this has not as yet passed

Congress, it is still under discussion, we are advised there is a strong probability that it will pass.

#### ***Revised Terms and Conditions — Bingo/Breakopen/Registration***

- Revisions to allow the charitable bingos to compete more effectively with expanded gaming (VLTs and casinos).
- Improvements to the Association Model and the structure of the bingo associations. To provide terms and conditions with which compliance can be reasonably expected, given the expanded gaming market.
- Provide clearer, simplified terms and conditions which charitable organizations can easily understand.

#### ***Implementation of Linked Bingo***

- Scheduled to start in September 1999.
- Cash and paper management to utilize the same hardware will also be implemented provincially.

#### ***Implementation of Breakopen Vending Machines***

- SLGA is introducing breakopen vending machines to the Hospitals Breakopen.

#### ***Inspections***

- The Inspection Services Branch of the Authority is charged with the responsibility of regulation within the gaming and liquor industries in the Province. The current staff consists of 3 management positions, 7 investigators, 1 registration officer, and 2 support staff. The staff is divided between two offices, one in Regina for the southern portion of the province and one in Saskatoon for the northern portion of the province. As well as liquor regulation, the Branch is responsible for the following gaming areas:

##### ***Security***

- Registered Gaming Suppliers;
- Registered Gaming Employees; and
- VLT Program Applicants.

### **Inspection/Investigation**

- Bingo & Break-open Casinos;
- Raffles;
- VLT Program; and
- Horse Racing.

In the 1998/99 fiscal year there were 2,016 gaming registrations issued for gaming employees and suppliers.

The Security function continues to demand a significant amount of investigation time due to a steady turn around of staff.

Inspection Services entered into an agreement with Alberta, British Columbia and Manitoba with a view to developing a network for the sharing of information.

The gaming industry in Saskatchewan continues to thrive and, as such, requires constant monitoring through inspections and investigation of public complaints.

## **MANITOBA**

### **Agencies Involved**

- ▶ Manitoba Gaming Control Commission (Regulatory - functions include Licensing, Registration, Audit, Technical Integrity, Native Gaming, Investigation, & Inspection services).
- ▶ The Manitoba Lotteries Corporation (Crown Corporation - includes Marketing & Operations of facilities).
- ▶ First Nations Gaming Commissions authorized by Order-in-Council as per section 207(1)(b) of the Criminal Code.
- ▶ Municipal, Local Government Districts, City offices authorized by Order-in-Council to licence and regulate raffles with prize values of \$3,000 or less pursuant to section 207 (1)(b) of the Criminal Code.

### **Charitable Licensing**

To be eligible in Manitoba for a charitable gaming licence, an organization must be a volunteer, democratic, non-profit charitable or religious body. The funds generated from a lottery must be used for the advancement of education, religion, health, the relief of poverty, or must benefit the community through the promotion of sport, recreation, culture, or any other area considered appropriate by the Commission.

### **Specific Gaming Activities**

#### ***Bingo***

- ▶ The enabling legislation is The Gaming Control Act and the accompanying Regulations.
- ▶ The number of licences issued to charitable organizations to operate bingo events from April, 1998 to March, 1999 was 666. This number includes regular bingo, media bingo and penny bingo.
- ▶ Although there are no commercial licensees, the Manitoba Lotteries Corporation runs two facilities: McPhillips Street Station and Club Regent. Charitable organizations may apply to raise funds by volunteering to assist with the operation of paper bingo events at these two facilities.
- ▶ Games played in Manitoba include: traditional hall bingo (paper

product, hard cards), and media bingo (television, radio, newspaper)

- ▶ Media bingo is a lottery scheme which is transacted via a medium of mass communication, including but not limited to radio, newspaper, magazines, periodicals, television, closed circuit, satellite and cable transmissions. In Media Bingo, a prize or prizes are awarded or disposed of by selling one or more media bingo papers. Players attempt to complete a pre-determined pattern on the media bingo papers using the numbers called. The numbers are conveyed to the players using one or more of the above methods of communication. The player(s) correctly completing the required pattern in the least amount of numbers, within the specified time frame, are, upon verification, declared the winner(s).

#### **Regulatory Requirements**

- ▶ Maximum prize value per evening: licensees determine their prizes.
- ▶ The maximum authorized amount for expenses are 10 per cent of gross revenue for bingo.
- ▶ Minimum rate of return to charitable organization: no profit requirement.
- ▶ Maximum events per year: organizations are limited to five (5) per hall per week and halls can not be used primarily for bingo.
- ▶ Bingos can only be carried out in publicly owned facilities or facilities owned by the Licensee or by another charitable organization.
- ▶ Non-government commercial bingo operations are not permitted.

#### **Raffles**

- ▶ The enabling legislation is The Gaming Control Act and the accompanying Regulations.
- ▶ The number of charitable organizations which received a raffle licence from April, 1998 to March, 1999 was 158.

### **Regulatory Requirements**

- ▶ The maximum prize value allowed for regular raffles is \$125,000.
- ▶ The maximum prize value allowed for 50/50 raffle draws is \$2,500.
- ▶ The maximum prize value allowed for major raffles is over \$125,000 but not exceeding \$500,000.
- ▶ The maximum prize value allowed for Municipal licensed raffles is \$3,000.
- ▶ The maximum authorized amount for expenses is 10 per cent of gross revenue for regular and 50/50 raffles, and 15 per cent for major raffles.
- ▶ There is no profit requirement for the rate of return to charitable organizations.
- ▶ 50/50 draw – 50 per cent of the gross ticket sales revenue is awarded as a prize to a winner determined by lot. The maximum gross revenue (before prizes) cannot exceed five thousand dollars. The maximum prize value can not exceed twenty-five hundred dollars.
- ▶ Major Raffle – Prizes in excess of one hundred twenty-five thousand dollars but not exceeding five hundred thousand dollars are restricted to four per year.
- ▶ Government run ticket lotteries – The Manitoba Lotteries Corporation distributes national and regional lottery tickets through the Western Canada Lotteries Corporation lottery retailers.

### ***Breakopen***

- ▶ The enabling legislation is The Gaming Control Act and the accompanying Regulations.
- ▶ The number of licences issued to charitable organizations to operate break-open events from April, 1998 to March, 1999 was 507.

### **Regulatory Requirements**

- ▶ The maximum prize value is \$1,000 (this depends on the type of ticket).
- ▶ The maximum authorized amount for prizes is between 63 per cent to 82 per cent of each unit (depends on the type of ticket).



- ▶ 7.5 per cent of gross revenue for break-open is the maximum authorized amount for expenses.
- ▶ Minimum rate of return to charitable organizations is between 14 per cent to 29 per cent of the gross revenue.
- ▶ Breakopen ticket – is a bearer ticket, which must be presented to the selling organization, at the location purchased to win the indicated prize. Patrons must be at least 18 years of age to purchase these types of tickets.
- ▶ Government run ticket lotteries – The Manitoba Lotteries Corporation distributes break-open tickets through the Western Canada Lotteries Corporation lottery retailers.

### **Casinos**

- ▶ Charitable Operations – In Manitoba charitable organizations may apply for licences to conduct Monte Carlo events. These events allow the operation of Blackjack and Wheel of Fortune games for a maximum three day period. Electronic games and other games of chance are prohibited.
- ▶ Monte Carlo – The enabling legislation is The Gaming Control Act and the accompanying Regulations. The number of licences issued to charitable organization to operate Monte Carlo events from April, 1998 to March, 1999 was four.

#### **Regulatory requirements**

- ▶ Patrons must be 18 years of age to participate.
- ▶ Maximum number of games cannot exceed eight.
- ▶ Restrictions on types of games played – eight games tables consisting of wheels of fortune and a maximum of four blackjack tables.
- ▶ Amounts wagered cannot exceed \$1.00.
- ▶ A premises is restricted to two monte carlo events per calendar year and not to exceed three days.
- ▶ Blackjack – The object is to be dealt cards having a higher count than those of the dealer up to but not exceeding 21.
- ▶ Wheel of Fortune – A gambling device bearing some resemblance to a revolving wheel with sections indicating chances taken or bets placed.

### ***Government Operated Casinos***

- ▶ There are three government owned and operated casinos - the Crystal Casino, Club Regent and McPhillips Street Station. These facilities are operated by the Manitoba Lotteries Corporation (MLC), a provincial crown corporation.
- ▶ The MLC derives its authority from the Manitoba Lotteries Corporation Act. Part 1 of the Act applies to Government Lotteries, including casinos. Lottery Regulation 119/88 (amended 338/94) authorizes the MLC to conduct and manage all casinos within Manitoba. The Gaming Control Act requires the Gaming Control Commission to register all casino employees, electronic casino games and suppliers to the Manitoba Lotteries Corporation.
- ▶ Crystal Casino has 28 Table Games and 226 Slot Machines. The minimum wager is \$5.00 and the maximum wager is \$500. The Crystal Casino is scheduled to close in July 1999.
- ▶ Club Regent has 320 Slot Machines and 516 Touchscreen Game Terminals. Table games will be added when the facility expansion is complete in July 1999.
- ▶ McPhillips Street Station has 504 Slot Machines and 516 Touchscreen Game Terminals. Table games will be added when the facility expansion is complete in July 1999.

### ***Regulatory Requirements***

- ▶ Manitoba casinos are age-restricted. Patrons must be at least 18 years of age.
- ▶ There are no regulations concerning minimum or maximum amounts wagered or prizes awarded.

### ***Video Lottery Terminals (VLTs)***

- ▶ Part 1 of The Manitoba Lotteries Corporation Act empowers the MLC to conduct and manage lottery schemes, including VLTs. The MLC functions in this authority in relation to the operation of VLTs. Video Lottery Regulation 245/91 sets out certain terms and restrictions and provides for VLT siteholder agreements. The Gaming Control Act requires the Manitoba Gaming Control Commission to register VLTs, VLT siteholder agreements and MLC employees.
- ▶ As of June 22, 1999, there were 4,951 VLTs in Manitoba, including 331 at First Nations sites.

- ▶ Commercial siteholders receive a commission of 20 per cent, the MLC retains 80 per cent of the proceeds which is directed to Provincial revenues and is divided according to this formula:
  - ▶ 65 per cent - general revenues;
  - ▶ 25 per cent - rural and urban development programs; and
  - ▶ 10 per cent - municipal grant on a per capita basis.
- ▶ In the case of First Nations, the commission is 90 per cent of the proceeds of VLTs, while the MLC retains 10 per cent. First Nations sites determine the use of their 90 per cent while the 10 per cent collected by the Manitoba Lotteries Corporation covers the costs involved in administering the program.
- ▶ Assiniboia Downs, the major provincial racetrack, offers 140 video gaming machines (VGM). These machines combine horse race wagering and traditional VLT style games. The Gaming Control Commission registers all VGMs.

### **Regulatory Requirements**

- ▶ Commercial VLT sites must be licensed by the Manitoba Liquor Control Commission (except those located on reserves). All sites must be age-controlled, as patrons must be at least 18 years old.

### ***First Nations Gaming***

- ▶ As of June 23, 1999, there are thirty-two gaming commissions representing thirty-four First Nations.
- ▶ The First Nations Bands with existing Gaming Commission Agreements are as follows:
  - ▶ The Opaskwayak Cree Nation (formerly The Pas) – January 9, 1990;
  - ▶ The West Region Economic Development Corp. (Represents three Bands: Gambler, Keeseekoowenin and Rolling River – May 9, 1991;
  - ▶ The Norway House Indian Band – June 7, 1991;
  - ▶ The Roseau River Anishinabe First Nation – March 13, 1992;
  - ▶ The Mathias Colomb Indian Band – April 6, 1992;
  - ▶ The Nelson House First Nation – August 5, 1992;
  - ▶ The Crane River First Nation – September 28, 1992 and November 2, 1992;
  - ▶ The Moose Lake Indian Band – December 15, 1992;

- ▶ The Fox Lake First Nation – December 23, 1992;
  - ▶ The Birdtail Sioux First Nation – March 8, 1993;
  - ▶ The Sandy Bay First Nation – March 3, 1993;
  - ▶ The Chemawawin First Nation – May 19, 1993;
  - ▶ The Peguis Indian Band – June 24, 1993;
  - ▶ The Pine Creek First Nation – August 16, 1993;
  - ▶ The Grand Rapids First Nation – October 6, 1993;
  - ▶ The Ebb and Flow First Nation – May 12, 1994;
  - ▶ The Waywayseecappo First Nation – May 26, 1994;
  - ▶ The Berens River First Nation – May 26, 1994;
  - ▶ The Dakota Tipi First Nation – September 27, 1994;
  - ▶ The Valley River First Nation – October 27, 1994;
  - ▶ The Brokenhead Ojibway Nation – February 23, 1995;
  - ▶ The Bloodvein First Nation – January 2, 1997;
  - ▶ The Split Lake Cree First Nation – January 2, 1997;
  - ▶ The Waterhen First Nation – February 11, 1997;
  - ▶ The Hollow Water First Nation – March 10, 1997;
  - ▶ The Fisher River First Nation – March 10, 1997;
  - ▶ The Sagkeeng First Nation – July 3, 1997;
  - ▶ The Swan Lake First Nation – December 5, 1997;
  - ▶ The Lake Manitoba First Nation – April 28, 1998;
  - ▶ The Sioux Valley Dakota Nation – April 21, 1999;
  - ▶ The Little Black River First Nation (signed a Gaming Commission Agreement April 16, 1999, we are currently awaiting Order-in-Council for ratification); and
  - ▶ The Barren Lands First Nation (signed a Gaming Commission Agreement May 26, 1999, we are currently awaiting Order-in-Council for ratification).
- ▶ The gaming activities permitted through the Native Gaming Commission Agreements are within the meaning of Section 207(1)(b) of the Criminal Code of Canada, ie. the same as those licensed activities permitted off-Reserve. All First Nations Gaming Commissions' terms and conditions are the same as terms and conditions which apply to licences issued by the Manitoba Gaming Control Commission for off-Reserve gaming activities. Any restrictions on these activities are the same as those off-Reserve.
  - ▶ As of June 23, 1999, the number of existing Video Lottery Terminal Siteholder Agreements are 15 First Nations with

siteholder agreements for a total of (331) VLTs.

- ▶ The moratorium on VLTs on Manitoba First Nations was lifted on June 18, 1999, after more than four (4) years of imposition. The government also announced that there would be no First Nations Casinos in Manitoba. It is anticipated that within a year, forty (40) Manitoba First Nations will have agreements with the Manitoba Lotteries Corporation for VLTs on their Reserves. The estimated total number of VLTs is 600+, generating over \$20 million net revenue for the Reserves and over \$2 million net revenue toward the costs of running this scheme.
- ▶ First Nations will not be eligible for VLTs unless their gaming on Reserve is being regulated and in compliance with all gaming laws and regulations.
- ▶ Agencies charged with regulating First Nations gaming:
  - ▶ Manitoba Gaming Control Commission's Native Gaming Section;
  - ▶ The 31 First Nation Gaming Commissions; and
  - ▶ RCMP (Royal Canadian Mounted Police) - violations of the Criminal Code of Canada.

## **ONTARIO**

### **Alcohol & Gaming Commission of Ontario Merger**

- ▶ Effective February 23, 1998, the Liquor License Board of Ontario and the Ontario Gaming Control Commission were replaced by the new Alcohol & Gaming Commission of Ontario (AGCO). A head office was secured for the new agency at 20 Dundas St. West in Toronto and, in March and April, staff of the two former agencies were moved in stages to the new location. Over the past year, in anticipation of new regional gaming initiatives, regional offices were opened in London, Thunder Bay, Ottawa, Brockville, and Sudbury for investigations and inspection staff.

### **Charity Casinos and Slot Machines**

- ▶ On April 9, 1998, the Chair of Management Board announced a new model for charity casinos and cancellation of the video lottery initiative. VLTs would be replaced with slot machines at the 44 charity gaming clubs and at racetracks, with the Ontario Lottery Corporation responsible for business management. The three-day Monte Carlos were discontinued as of March 31, 1998. In order to assist charities in the transition period between the elimination of Monte Carlos and the opening of the charity gaming clubs, \$40 million in advance funding for charities was also announced.
- ▶ On June 26, 1998, the Chair of Management Board announced that the charity casino program was canceled and that any future casino expansion would require municipalities to hold referenda concurrent with municipal elections. Four pilot projects will still go forward in municipalities that already had positive referendum results. These are Thunder Bay, Point Edward, Sault Ste. Marie and Brantford. These four sites will be operated by the Ontario Lottery Corporation. In addition, the \$40 million in funding for charities will remain in place for 1998. Beginning in 1999, charities will be guaranteed \$100 million each year. The slot machine initiative at race tracks will continue with 2 per cent of gross slot machine revenues devoted to problem gambling.
- ▶ Thus far, one charity casino in Sault Ste. Marie opened in May 1999, and slot machines were introduced first at Windsor Raceway in

December 1998 and then at Hiawatha in May. The opening of other facilities is anticipated to occur over the Summer and Fall.

### **Bingo Review**

- ▶ At the request of our bingo stakeholders, the AGCO and the bingo industry have embarked on a process to look at how the regulatory framework for bingo can be changed to meet the challenges of the future. A working group has been established of charity and industry members to look at what can be accomplished under the existing framework under s. 207 (1) (b) of the Criminal Code of Canada to make bingo more viable and competitive with other forms of gaming. The review is concentrating on making improvements in two areas -- providing more flexible staffing of bingo events and advertising and promotion.

### **Agencies Involved**

- ▶ The Gaming Secretariat is a division of Management Board Secretariat.
  - ▶ Provides overall government gaming strategy and policy and coordinates business and implementation of gaming operations.
- ▶ The Ontario Lottery Corporation reports to the Chair of Management Board.
  - ▶ Operates lottery games (e.g., 6/49, Super 7, Superstar Bingo); and
  - ▶ Will conduct and manage four pilot project casinos and slot machines at racetracks.
- ▶ The Ontario Casino Corporation reports through the Gaming Secretariat to the Chair of Management Board.
  - ▶ Operates Ontario's three commercial casinos - Casino Windsor, Casino Niagara, and Casino Rama -- through private sector management agents.
  - ▶ The AGCO reports to the Minister of Consumer and Commercial Relations.
  - ▶ Registration and regulation of suppliers to and employees of casinos, charity casinos, slot machines at racetracks, and licensed charitable gaming events;
  - ▶ Licensing of charitable organizations to hold lottery events; and

- ▶ Licensing and regulation of the production and sale of beverage alcohol.
- ▶ Ontario Racing Commission -- reports to the Minister of Consumer and Commercial Relations.
  - ▶ Registration and regulation of racetracks and teletheatres, administers Racetracks Tax Act.
- ▶ Illegal Gaming Enforcement Unit -- Ontario Provincial Police
  - ▶ Investigation and enforcement of illegal gaming activities.
- ▶ Municipal Governments
  - ▶ Responsible for licensing charitable gaming events:
    - ▶ Bingo events up to \$5,500 in prizes;
    - ▶ Raffles up to \$50,000 in prizes;
    - ▶ Break-open tickets for local organizations;
    - ▶ Bazaar licenses; and
  - ▶ Determine roster of charities to share in \$40 million advance funding from charity casinos.

### **Charitable Licensing**

- ▶ Organizations dedicated to:
  - ▶ relief of poverty;
  - ▶ advancement of religion;
  - ▶ advancement of education; and
  - ▶ other purposes beneficial to the community.
- ▶ The category "other purposes beneficial to the community" includes:
  - ▶ the advancement of culture and the arts;
  - ▶ advancement of health and welfare;
  - ▶ sports organizations (promoting youth sports);
  - ▶ non-profit service clubs which use proceeds for charitable purposes; and
  - ▶ organizations providing public amenities benefitting the community.
- ▶ Ineligible organizations include:
  - ▶ social clubs, hobby groups;
  - ▶ professional associations, unions;
  - ▶ political lobby groups;



- legal advocacy groups; and
- professional or adult sports teams.

## **Specific Gaming Activities**

### ***Order-in-Council 2688/93***

- Authorizes the licensing framework for charitable organizations to hold lottery events and sets out the limits of municipal and provincial licensing.

### ***Gaming Control Act, 1992***

- Requires the registration of persons supplying goods or services to charitable or casino gaming events. This includes requiring registration of bingo hall operators, bingo paper and Break-open ticket manufacturers, gaming service suppliers, gaming equipment manufacturers, gaming equipment suppliers, Break-open ticket sellers, gaming premises managers, gaming services employees, bingo callers and croupiers, gaming related suppliers, non-gaming related suppliers, gaming employees, and gaming key employees.
- Our total gaming registrant base is approximately 27,000.

### ***Bingo***

- Gaming Control Act, 1992 and Order-in-Council 2688/93.
- Licensing authority for over 90 per cent of regular bingo events held in Ontario has been delegated to municipalities. The AGCO issued 1,245 licenses for various types of bingo events to charitable organizations in 1998. There are approximately 190 registered bingo halls in the Province.
- Types of licensed bingo events include regular (traditional) bingo; monster bingo, superjackpot bingo, media bingo, merchandise bingo; decision bingo, and shutter board bingo.
- In addition, the Ontario Lottery Corporation operates SuperStar Bingo, a nightly, linked bingo event that is played in about 187 bingo halls. (SuperStar Bingo is not a licensed event.)

### **Regulatory Requirements**

- Regulatory requirements regarding how the game is played, expenses, rate of return, etc., are set out in terms and

conditions of the bingo license.

- ▶ Maximum prize board for a regular municipally licensed bingo event is \$5,500.
- ▶ There is no minimum rate of return guaranteed to charities; rather, a formula for distribution of gross receipts is set out in the terms.
- ▶ For events held in bingo halls using hall staff, after deducting the prizes, license fee, honoraria to bona fide members, and advertising costs, the remaining proceeds are split between the licensee and hall operator, with the licensee retaining 60 per cent. The licensee may pay the hall operator a maximum of 40 per cent of the remaining proceeds, or a maximum of 15 per cent of the gross receipts, whichever is less.
- ▶ Charities may be licensed to hold 52 bingo events in one year.

### ***Raffles, Breakopen Tickets***

- ▶ Gaming Control Act and Order-in-Council 2688/93.
- ▶ In 1998, the AGCO issued 191 raffles licenses. Municipalities issue licenses for the majority of raffle events with prizes up to \$50,000, while the AGCO issues raffle licenses with prizes over that amount.
- ▶ In 1998, the AGCO issued 1,064 Break-open tickets licenses. For the most part, they represent Break-open tickets sold at bingo halls and by provincially based organizations. Municipalities issue licenses for the majority of Break-open tickets sold by local organizations at approximately 8,000 registered Break-open ticket retail sites.

### **Regulatory Requirements**

- ▶ Requirements are set out in Raffle License Terms and Conditions and Break-open Ticket License Terms and Conditions.
- ▶ There is no ceiling on the value of prizes that can be offered at a licensed raffle event, except as governed by the limits of municipal licensing authority. The retail value of the prizes to be awarded cannot be less than 20 per cent of the anticipated gross proceeds from the sale of tickets.
- ▶ The only restriction on amount of expenses that can be incurred for raffles is that raffle ticket sellers can be paid a sales

commission of not more than 5 per cent of the price of each ticket sold.

- ▶ In order to improve regulatory control over Break-open tickets, in the Fall of 1997, the manufacture of Break-open tickets was centralized and two companies were selected to manufacture all Break-open tickets in Ontario. This process also provided an opportunity for new BOT tickets to be introduced with different prices and payouts. A provincial administration fee of 5 per cent of the gross selling price is charged with a corresponding reduction in the prize payout. This new fee does not impact the net profit to charities.
- ▶ Maximum prize values vary per type of break-open ticket and range from \$300 (sold at third party retail sites) to \$1,000 (sold at bingo halls).
- ▶ Maximum allowable expenses for break-open tickets vary depending on the type of ticket. Minimum profit to charity also varies with the type of ticket sold, but is generally higher than the minimum profit available from the tickets on the market under the previous system.

### ***Casinos***

- ▶ Enabling Legislation includes: Ontario Casino Corporation Act and Gaming Control Act; Casino Windsor, Casino Rama, and Casino Niagara are all conducted and managed by the Ontario Casino Corporation; Casino Windsor has 131 table games and 3,001 slot machines; Casino Rama has 111 table games and 2,329 slot machines; Casino Niagara has 135 table games and 2,789 slot machines; and Sault Ste. Marie Charity Casino has 31 table games and 450 slot machines.

#### **Regulatory Requirements**

- ▶ Ontario's three commercial casinos are conducted and managed by the Ontario Casino Corporation, and are subject to Gaming Control Act regulatory requirements. These include requirements regarding registration of suppliers, operators, and employees. In addition, regulations set out approval requirements for the rules of play to be used, gaming equipment, slot machines, chips, tokens, internal controls, security, credit, record keeping and recording of large cash

transactions, and surveillance. Persons under the age of nineteen are prohibited from playing games of chance at the casinos.

- ▶ The charity casinos and slot machines at racetracks are directly operated by the Ontario Lottery Corporation, and are subject to similar stringent regulatory requirements under the Gaming Control Act.
- ▶ Monte Carlo events were eliminated in March, 1998. Monte Carlos were licensed lottery events at which blackjack, hold'em poker and wheels of fortune could be played. They have been replaced with social gaming events which must be held in connection with a social event such as a dinner dance and are limited to eight hours duration, at which only blackjack and wheels of fortune can be played.

### ***Video Lottery Terminals***

- ▶ VLTs are not permitted in Ontario.

### ***First Nations Gaming***

- ▶ Gaming Agreements and Codes have been entered into with the following First Nations: Mississaugas of Scugog Island (near Port Perry); Waushaushk Onigum First Nation (near Kenora); and Ginoogaming First Nation (near Geraldton).
- ▶ These agreements allow the First Nations Charitable Foundations to issue lottery licenses for certain types of lottery events to charitable organizations. These include bingos, Break-open tickets, and Monte Carlos, but do not authorize VLTs or slot machines.
- ▶ Both the Mississaugas of Scugog Island and the Waushaushk Onigum First Nations have entered into agreements with private sector companies to operate gaming facilities on their behalf.
- ▶ The regulatory requirements under the Gaming Control Act apply to the operators of these facilities and their employees, which is the responsibility of the AGCO.
- ▶ Two First Nations have been given delegated authority through Orders-in-Council which allow them to issue lottery licences to on Reserve charitable organizations for bingo and break-open tickets with prize boards up to a certain monetary value. They are the Mattagami First Nation and the Mississauga First Nation. Five others have requested this authority and 22 have expressed an

interest in obtaining the new licensing authority. The First Nations are responsible for enforcement and compliance in connection with the licenses that they issue.

### **Ontario Illegal Gaming Enforcement Unit**

The Provincial Illegal Gaming Program is an integral component of the Province of Ontario's comprehensive gaming strategy, a commitment to combating organized crime as well as initiatives focusing on profit motivated crime.

#### ***Mandate***

- ▶ The mandate of OIGEU is to provide a dedicated, coordinated, multi-jurisdictional investigative and enforcement response to illegal gambling in Ontario. This includes the provision of expert advice, operational assistance and case management services.

#### ***Service Delivery***

- ▶ The unit is provincially funded and its specialized service is available to all police agencies in Ontario. Unit staff assigned to and funded by the Ontario Racing Commission provide specialized expertise in the investigation of irregularities within the horse racing industry and enforcement of the rules of racing in Ontario.

#### ***Enforcement***

- ▶ Utilizing Part VII of the Criminal Code of Canada and Proceeds of Crime Legislation, OIGEU provides investigative leadership with respect to the detection, investigation and prevention of illegal gambling. The unit targets the offences committed by and profits derived from organized crime.
- ▶ Since inception in May 1996, the Unit has been involved with 736 occurrences, 1,136 people have been charged with 1992 Criminal Code gambling offences resulting in gaming paraphernalia seizures totalling \$4.1 million and cash in the amount of \$523,294.22. Fines and proceeds of crime total \$1,184,645.02.

#### ***Crime Prevention***

- ▶ The unit works in concert with the media, Crime Stoppers, community groups and the private sector in addition to government agencies to ensure the dissemination of awareness and crime prevention strategies.

- ▶ Large scale investigations throughout the Province and positive media coverage of the outcome has resulted in increased awareness of OIGEU's mandate and its ability to maintain a sustained province-wide enforcement response to illegal gambling.

### ***Training***

- ▶ Illegal Gambling training has been also provided to police officers from around the world in cooperation with the Asian Organized Crime Conference in Toronto, Criminal Intelligence Service Canada and the Israeli Police Service.
- ▶ In November 1998, OIGEU provided specialized training to 25 Police Officers from across Canada. A number of the officers in attendance were sponsored by CAGRA members. A similar program is scheduled for the fall of 1999.

## **QUEBEC**

### **Agencies Involved**

- ▶ Régie des alcools, des courses et des jeux;
- ▶ Société des bingos du Québec (A Loto-Québec branch);
- ▶ Société des loteries (A Loto-Québec branch); and
- ▶ Société des casinos (A Loto-Québec branch).

### **Charitable Licensing**

- ▶ Organizations dedicated to:
  - ▶ relief of poverty;
  - ▶ advancement of education;
  - ▶ advancement of religion;
  - ▶ advancement of culture and the arts;
  - ▶ advancement of sports organizations; or
  - ▶ advancement of community organizations.

### **Specific Gaming Activities**

- ▶ Enabling legislation includes: Loi sur la Régie des alcools, des courses et des jeux; Loi sur les loteries, les concours publicitaires et les appareils d'amusement; Loi sur la Société des loteries du Québec; Règles sur les bingos; Règlements sur les bingos; Règles sur les systèmes de loteries; Règlements sur les systèmes de loteries; Règles sur les normes relatives à l'admission du public, au maintien de l'ordre public et à la sécurité des personnels dans les casinos d'État; Règles sur les conditions d'embauche dans un casino d'État; Règlement sur les jeux de casino; Règles sur les appareils de loterie vidéo; Règlement sur les droits et frais payables pour les licences, l'immatriculation et les autorisations relatives aux loteries vidéo; Règlement sur le taux de retour des loteries vidéo; Règlement sur les personnels devant respecter les conditions de délivrance et de maintien d'une licence relative aux loteries vidéo; and Règlement sur le système de loterie vidéo.

### ***Bingo***

- ▶ There are 2,405 charitable licensees and 102 television bingo licensees.

- ▶ Games played include traditional, television bingo, and electronic/linked bingo.

#### **Regulatory Requirements**

- ▶ Maximum prize value per evening is \$3,500 (no more than one bingo per week) or \$5,000 (no more than 2 per year);
- ▶ Maximum authorized costs related to all the services offered by the operator are 14 per cent of the total sales;
- ▶ Maximum authorized paper related cost is not more than 5 per cent of the total sales;
- ▶ Maximum advertising expenses are not more than 2 per cent of the value of the prizes offered;
- ▶ Maximum cost in the form of salaries is not more than 9 per cent of the total sales;
- ▶ Minimum rate of return to charitable organizations is 10 per cent of gross receipts; and
- ▶ Maximum number of events per year is 52.

#### ***Raffles***

- ▶ There are 1,953 charitable licensees.
- ▶ Government-run ticket lotteries are governed by Loto-Québec.

#### **Regulatory Requirements**

- ▶ Minimum prize payout is 10 per cent of gross revenue; and
- ▶ Minimum rate of return to the charitable organization is 50 per cent of net revenue.

#### ***Casinos***

- ▶ Casino de Montréal, Casino de Hull, and Casino de Charlevoix are all government-operated casinos.
- ▶ Casino de Montréal has 118 table games and 3,046 slot machines.
- ▶ Casino de Hull has 55 table games and 1,403 slot machines.
- ▶ Casino de Charlevoix has 21 table games and 780 slot machines.

#### **Regulatory Requirements**

- ▶ Persons under the age of 18 are prohibited from playing at the casinos.
- ▶ Casinos are subject to regulatory requirements including requirements regarding suppliers, operators and employees,



rules of play to be used, gaming equipment, slot machines, and credit.

### ***Video Lottery Terminals***

- ▶ There are 15,314 VLTs in 4,645 sites.
- ▶ The VLT siteholder receives 30 per cent of the gross revenue and Loto-Québec receives 70 per cent of the gross revenue.

### **Regulatory Requirements**

- ▶ VLTs are owned by Société des loteries video du Québec (A Loto-Québec branch);
- ▶ Minimum age restriction of 18 years old;
- ▶ VLTs are restricted to liquor-permitted premises; and
- ▶ Minimum payout is 83 per cent.

### ***First Nations Gaming***

- ▶ No special provisions exist for "First Nations Gaming."

## **NEW BRUNSWICK**

### **Agencies Involved**

- ▶ The Lotteries Commission of New Brunswick is responsible for all Provincial gaming policy and direction (includes harness racing). Holds share for the Atlantic Lottery Corporation (ALC) and appoints Board members.
- ▶ The Revenue Division of the Department of Finance has responsibility, from the Commission, for delivery of charitable gaming licensing and field enforcement of charitable gaming and video lottery regulations.
- ▶ ALC provides a variety of lottery products on behalf of the Province (including conducting and managing video lottery) through agreements with the Lotteries Commission. ALC handles products of the Interprovincial Lottery Corporation and the marketing and product development relating to harness racing for provincial racetracks.
- ▶ The Department of the Solicitor General is indirectly involved in gaming through its policing responsibilities and the Criminal Code of Canada.
- ▶ St. Mary's First Nation Gaming Commission.
- ▶ Fort Folly First Nation Gaming Commission.
- ▶ Woodstock First Nation Gaming Commission.
- ▶ Annual Agricultural Fairs and Fisheries Festivals.

### **Charitable Licensing**

- ▶ "Charitable object or purpose means" any object for:
  - ▶ The relief of poverty;
  - ▶ Education;
  - ▶ Advancement of religion; or
  - ▶ Any purpose beneficial to the community.
- ▶ "Charitable or Religious organization" means an organization which performs services of public good or welfare without profit, includes an organization designated as such by the Minister.
- ▶ "Purpose beneficial to the community" means an activity or benefit to the public or section thereof and includes Amateur Sport, Social, Community or Fraternal activities.

### ***Mission Statement (Lotteries Commission)***

- ▶ The mission of the Lotteries Commission is to monitor, direct and control the development and operation of gaming in the Province.
- ▶ Strategic Goals (relating to charitable gaming)
  - ▶ Provide legal authority for gaming in New Brunswick through licensing and agreements under Provincial legislation and as authorized by the Criminal Code of Canada.
  - ▶ Assure the economic health and viability of licensed gaming in New Brunswick.
    - ▶ Assure that the main beneficiaries of licensed gaming are non-profit community groups and to restrict the involvement of commercial interests in licensed gaming.
    - ▶ Assure that all eligible non-profit community groups have access to licensed gaming.
    - ▶ Investigate and monitor gaming in the Province to ensure compliance with provincial requirements.
    - ▶ Provide timely and effective enforcement.
  - ▶ Maintain the integrity of licensed gaming in the Province.
    - ▶ Establish policies and regulations to hinder illegal gaming, cheating, fraud, and misrepresentation.
    - ▶ Educate the public on matters relating to the integrity of gaming.
    - ▶ Monitor and direct action to assure the integrity of the industry.
  - ▶ Research, develop, recommend policy, and take action on gaming matters for New Brunswick.
    - ▶ Assess gaming trends and issues, and recommend appropriate policy for the future.
    - ▶ Take action on the basis of research and policy recommendations.

### **Specific Gaming Activities**

#### ***Bingo***

- ▶ Enabling legislation includes: Order in Council for Commission licensing authority; and the Regulatory Authority: Terms and Conditions for Lottery Licensing.
- ▶ Number of charitable licenses is 395 (does not include permits for games with prize values per event under \$500). No commercial

licenses are possible.

- ▶ Types of bingo played include: traditional, high stakes, televised, video lottery (allowable game option under the video lottery program), Annual Agricultural Fairs, and Fisheries festival merchandise games.

#### **Regulatory Requirements**

- ▶ Maximum prize value per event is \$15,000 for regular bingo sessions.
- ▶ Prize value is unlimited for Giant bingo events (two per location per month, twenty-four per licensee per year).
- ▶ Maximum authorized expenses are not applicable, "licensees must be the main beneficiaries of the licensed activity."
- ▶ The minimum rate of return to licensees must be "15 per cent of gross proceeds." "Commercial and private interests must not become the main beneficiaries."
- ▶ The maximum allowable number of regular bingo events per licensee is 104 per year. The maximum per location is four per week. Only twenty-four Giant Bingo events are allowed per licensee per year. Only two per month are allowed per location.

#### ***Raffles, Breakopen Tickets***

- ▶ Enabling legislation includes: Order in Council for Commission licensing authority; and the regulatory authority: Terms and Conditions for Lottery Licensing.
- ▶ Number of charitable licenses is 498 (does not include permits for games with prize values per event under \$500). No commercial licenses are possible.
- ▶ Government run ticket lotteries are provided through ALC.

#### **Regulatory Requirements**

- ▶ No raffle can exceed a prize value of \$75,000 per event.
- ▶ Maximum authorized expenses are not applicable; "licensees must be the main beneficiaries of the licensed activity."
- ▶ The minimum rate of return to licensees must be "15 per cent of gross proceeds. Commercial and private interests must not become the main beneficiaries."

### ***Casinos (Monte Carlo Nights)***

- ▶ There are no charitable or government-operated casinos in New Brunswick.
- ▶ The number of Monte Carlo licenses is 31.

#### **Regulatory Requirements**

- ▶ There are no age restrictions.
- ▶ Up to 20 blackjack tables and up to 10 wheels of fortune are allowed per event.
- ▶ Games must be played with scrip, tokens or chips.
- ▶ Prizes cannot be cash and "must be disposed of once only at a specified time each day, after play has ceased."

### ***Video Lottery Terminals***

- ▶ Enabling legislation includes: Lotteries Act, of New Brunswick and New Brunswick Regulation 90-142 under the Lotteries Act.
- ▶ There are approximately 2,279 VLTs in liquor-licensed establishments, and 808 located in unlicensed establishments.
- ▶ The formula for profit sharing: 54 per cent of the profit from VLTs goes to the Government, 24 per cent to the owner (coin operator), and 22 per cent to the siteholder.

#### **Regulatory Requirements**

- ▶ Must be nineteen or over to play.
- ▶ Eligible locations liquor-licensed, restaurants, convenience stores, gasoline sales outlets, tobacco/magazine stores, bowling alleys, taxi stands and passenger waiting rooms at boat, bus, rail, or air terminals.

## **NOVA SCOTIA**

### **Agencies Involved**

- ▶ The Nova Scotia Alcohol and Gaming Authority (Authority) is responsible for the registration and regulation of casinos and their suppliers, for regulating the conduct of lottery schemes, and the licensing of charitable organizations for the purposes of conducting lottery schemes.
- ▶ The Nova Scotia Gaming Corporation (Gaming Corporation) conducts and manages the Provincial Government's gaming activities, including the casinos and the activities of the Atlantic Lottery Corporation (ALC).
- ▶ On November 30, 1999, the Gaming Corporation will replace ALC as the administering body of Nova Scotia's Video Lottery Program.
- ▶ ALC conducts lottery schemes on behalf of the Atlantic Provinces. On March 31 of the year 2000, the provincial government of Nova Scotia will create an agency that will replace ALC and assume the responsibility of conducting gaming activity on behalf of the province.

### **Charitable Licensing**

- ▶ Charitable organizations licensed to conduct gaming activities pursuant to section 207(1)(b) of the Criminal Code must have as their objective one or more of the following purposes:
  - ▶ relief of poverty;
  - ▶ advancement of education;
  - ▶ advancement of religion; or
  - ▶ community objects or purposes (youth sports organizations are considered charitable, adult sports organizations are not).

Applicants for a charitable gaming license must provide the Authority with a description of the charitable purpose for which they intend to raise funds. Decisions with respect to the issuance of a license are made by a panel of the Authority. In the event that a license is issued, all funds derived from the gaming activity must be used for the stated charitable purpose.

## **Specific Gaming Activities**

- ▶ Enabling legislation includes: the Gaming Control Act; Bingo Regulations made pursuant to the Gaming Control Act; Bingo Suppliers Regulations; Ticket Lottery Regulations; Atlantic Lottery Regulations; Casino Regulations; Video Lottery Regulations; and The Video Lottery Terminal Moratorium Act.

### ***Bingo***

- ▶ There were approximately 394 series charitable bingo licenses, and approximately 230 single charitable licenses issued by the Authority during the 1998/99 fiscal year.
- ▶ Bingo licenses are issued only to raise funds for charitable purposes. Charitable licensees pay to the Authority a prize fee of 2 per cent of all prizes awarded.
- ▶ The Bingo Regulations do not allow the issuance of commercial bingo licenses. However, the Bingo Regulations allow for the annual renewal of commercial bingo licenses which were issued prior to January 1, 1982, if the licensee has been in operation continuously since the license was first issued.
- ▶ There are currently three commercial bingo licensees.
- ▶ Commercial licensees pay to the Authority a prize fee of 10 per cent of prizes awarded.
- ▶ Games played include regular (traditional) and media bingo.

#### **Regulatory Requirements**

- ▶ The value of any single prize awarded at a commercial bingo operation cannot exceed \$100.
- ▶ Total prize value for a charitable bingo operation cannot exceed \$15,000 per event.
- ▶ Pursuant to the Bingo Regulations, charitable organizations must operate in facilities that are owned by charitable organizations, and not in commercial premises.
- ▶ The regulations allow those charitable organizations which have continuously operated in a commercial facility prior to 1982 to continue operating there.
- ▶ The Bingo Suppliers Regulations require all those who wish to supply bingo equipment to be licensed by the Authority.

- ▶ The regulations stipulate that bingo equipment and supplies can be purchased only from a bingo supplier who is licensed by the Authority.
- ▶ The Bingo Suppliers Regulations state that no suppliers shall provide bingo operating equipment unless the recipient produces a valid bingo license or permit.
- ▶ Amendments to Section 6 of the Bingo Regulations (effective November 26, 1996) now distinguish between small bingo operations (which make \$150,000 or less in gross profit per annum) and large bingo operations (which make more than \$150,000 per annum).
- ▶ All charitable licensees are required to forward their revenues to their stated charitable purpose within a reasonable time; and all licensees are required to retain a minimum of 15 per cent (rate of return) of gross receipts in profit after all legitimate expenses of the bingo operation are paid.
- ▶ The Authority may cancel the license of any licensee who fails to meet the 15 per cent requirement.
- ▶ In instances where the licensee is a small scale bingo operator, the Authority may vary the required rate of return if, in the opinion of the Authority, the bingo operation otherwise serves a useful purpose to the community.

#### ***Online Ticket Lotteries***

- ▶ ALC conducts on-line, retail, and Break-open ticket lotteries.
- ▶ ALC is responsible for the promotion of its lottery schemes and the sale of tickets.
- ▶ Tickets may be sold to the public directly by ALC or through retailers.
- ▶ Where tickets are sold through a retailer, a discount or commission fixed by ALC is granted to the retailer.

#### **Regulatory Requirements**

- ▶ All on-line tickets must specify the price, value of prizes, and terms and conditions of the lottery scheme.
- ▶ Retailers are prohibited from selling tickets at prices other than the amount shown on the ticket.



### ***Charitable Ticket Lotteries***

- ▶ Ticket lottery operations are distinguished by prize value; and those lotteries which offer a prize over \$500 require a ticket lottery license; lotteries with a prize of \$500 or less require a lottery permit.
- ▶ During the 1998/99 period, the Authority issued 598 charitable ticket lottery single licenses, 424 charitable ticket lottery series licenses, and 4,505 ticket lottery permits.
- ▶ Types of licensed ticket lotteries include:
  - ▶ Calendar Draws;
  - ▶ Elimination Draws;
  - ▶ 50/50 Draws;
  - ▶ Rubber Duck Races;
  - ▶ Series Lotteries;
  - ▶ Sports Lotteries; and
  - ▶ Stub Draws.

### **Regulatory Requirements**

- ▶ In order to safeguard the interests of both the public and the organization and to assure the awarding of all prizes regardless of any possible extenuating circumstances, a financial guarantee is required covering the total market retail value of the prize structure to be awarded.
- ▶ This financial guarantee can be requested for any amount, but is required for any prize value of \$5,000 or over.
- ▶ Acceptable financial guarantees include an irrevocable letter of credit from a recognized financial institution; a certified cheque; or an indemnity bond from an insurance company.
- ▶ Applicants for a ticket lottery must undertake that all profits realized from ticket sales will be used for charitable purposes.
- ▶ Ticket lottery licensees are required to pay to the Authority a fee of 2 per cent of the prize value authorized by the license.
- ▶ Tickets with a selling price of \$5 or more must be sold individually and cannot be discounted with respect to the sale of more than one ticket to a purchaser.

## ***Casinos***

- ▶ There are two commercial casinos in Nova Scotia (Sheraton Halifax and Sheraton Sydney).
- ▶ The casinos are operated by Metropolitan Entertainment Group, as an agent for the Gaming Corporation.
- ▶ Types of games currently played at the Halifax casino include: roulette; baccarat including punto banco and chemin de fer; minibaccarat; blackjack; video poker; video keno; and video blackjack.
- ▶ Types of games currently played at the Sydney casino include: roulette; blackjack; and poker and its variations (Let it Ride, Seven Card Stud, and Texas Hold 'em).
- ▶ The Halifax casino has 30 tables and 565 slot machines.
- ▶ The Sydney casino has 14 tables and 353 slot machines.

### **Regulatory Requirements**

- ▶ The Casino operator, all casino employees, and casino gaming and non-gaming related suppliers are registered with the Authority.
- ▶ Play is prohibited for any person under 19 years of age.
- ▶ Regulations set out approval requirements for rules of play for casino games.
- ▶ Regulations set out procedural requirements for dispensing of tokens and cash, internal controls, security, record keeping, recording of large cash transactions, surveillance, and security.

## ***Video Lottery Terminals***

- ▶ As an agent of the Gaming Corporation, ALC currently operates all VLTs within the province of Nova Scotia. As of November 30, 1999, the Gaming Corporation will take over the Video Lottery Program from ALC.
- ▶ Currently, VLT operators split the profit made from VLTs in the following manner: 75 per cent to ALC and approximately 25 per cent to liquor establishment owners (the retailers' 25 per cent of the profit share is reduced by HST and contributions to the Nova Scotia Gaming Foundation).

### **Regulatory Requirements**

- ▶ Effective June 29 1998, the Video Lottery Terminals Moratorium Act came into force. As a result, no VLT registration certificate, license, or permit can be issued, renewed or amended if such would permit more VLTs than were legally authorized for operation or use immediately before the Video Lottery Terminals Moratorium Act came into effect.
- ▶ The number of VLT machines in operation at the time of passage of this Act based on an independent audit totaled 3,234. Currently, there are 3,218 machines operating in 577 premises. Movement of machines will occur due to business closures or seasonal locations, however, the total number will not exceed the audited 3,234 number.
- ▶ Only those persons designated by the Province can conduct and manage a video lottery scheme within Nova Scotia. At the present time, ALC is the agency designated by the Province to administer the Video Lottery Program. ALC will be replaced by the Gaming Corporation as of November 30, 1999.
- ▶ Only age-restricted liquor licensed establishments are permitted to be VLT operators.
- ▶ Play is prohibited for those under 19 years of age.
- ▶ A licensee shall not grant credit, cash cheques of any kind, provide loans, or make or assist with credit card advances to enable a person to play a VLT.

### ***First Nations Gaming***

- ▶ Gaming Agreements have been signed between the province of Nova Scotia and the following First Nations:
  - ▶ Acadia;
  - ▶ Annapolis Valley;
  - ▶ Chapel Island;
  - ▶ Eskasoni;
  - ▶ Horton;
  - ▶ Millbrook;
  - ▶ Pictou Landing;
  - ▶ Shubenacadie;
  - ▶ Wagmatcook; and
  - ▶ Whycocomagh.

- ▶ Gaming Agreements provide for a Native Gaming Commission on the Reserve, with authority to issue gaming licenses and regulate gaming activity.
- ▶ Gaming Agreements provide that First Nations Reserves can operate ticket lotteries, bingos, and VLTs owned by ALC.
- ▶ The number of VLTs allowed on Reserves is specified in individual Agreements which have been negotiated with the Gaming Corporation.
- ▶ Gaming agreements permit Reserves to have three super bingos per year, with prizes in excess of \$15,000 per day.

## **NEWFOUNDLAND**

### **Agencies Involved**

- ▶ Department of Government Services and Lands;
- ▶ Trade Practices and Licensing Division; and
- ▶ Atlantic Lottery Corporation (ALC) in conjunction with the three other Atlantic Provinces.

### **Charitable Licensing**

- ▶ The types of organizations that are licensed for charitable gaming are organizations having objects or purposes for the relief of poverty, the advancement of educations, the advancement of religion, or other purposes beneficial to the community.
- ▶ These organizations provide their services solely for public good or welfare and without profit or pecuniary gain to their members.

### **Specific Gaming Activities**

#### ***Bingo***

- ▶ Enabling legislation includes: Terms and Conditions, General Rules and Schedule "A", pursuant to Subsection 207.(1)(b) of the Criminal Code;
- ▶ Approximately 575 licenses are issued annually for traditional, television and radio;
- ▶ Maximum prize payout per event is \$3,000;
- ▶ Maximum prize payout per game, excluding media bingo is \$1,500;
- ▶ Maximum authorized expenses from gross bingo proceeds is 20 per cent;
- ▶ Minimum return for charity from gross bingo proceeds is 15 per cent;
- ▶ Maximum allowable events per week is two: St. John's area is one; and
- ▶ License fee is 1 per cent of prize payout.

#### ***Breakopen Tickets***

- ▶ Enabling legislation includes Terms and Conditions, General Rules and Schedule "B," pursuant to Subsection 207.(1)(b) of the

#### **Criminal Code;**

- ▶ ALC also has breakopen tickets that are sold at commercial locations by non-charitable organizations;
- ▶ Approximately 530 licenses issued annually;
- ▶ Maximum prize payout per box is \$800;
- ▶ Maximum ticket count per box is \$2,184;
- ▶ Maximum price per ticket is \$.50;
- ▶ Administrative fees not to exceed 7.5 per cent; and
- ▶ License fee is 1 per cent of prize payout.

#### ***Ticket Raffles***

- ▶ Enabling legislation includes: Terms and Conditions, General Rules and Schedule "C," pursuant to Subsection 207.(1)(b) of the Criminal Code;
- ▶ ALC administers the sale of 649 tickets and also scratch tickets, sold at commercial locations by non-charitable organizations;
- ▶ Approximately 530 licenses issued annually;
- ▶ Total value of tickets sold not to exceed 12 times the value of prize
- ▶ No limit on prize payout;
- ▶ Maximum commission payable on ticket sales is 20 per cent; and
- ▶ License fee is 1 per cent of prize payout.

#### ***Casinos***

- ▶ Enabling legislation includes Terms and Conditions, General Rules and Schedule "D" (games of chance) Schedule "E" (casino), pursuant to Subsection 207.(1)(b) of the Criminal Code;
- ▶ Approximately 30 Casino licenses and 220 Games of Chance licenses issued annually;
- ▶ No permanent casinos;
- ▶ No professional or paid casino promoters;
- ▶ Maximum of three casino events in a 12-month period;
- ▶ Maximum number of tables and wheels for Casinos is 20;
- ▶ Maximum number of wheels for Games of Chance is 10;
- ▶ Maximum bet, excluding splits, is \$5.00;
- ▶ Administrative fees not to exceed 7.5 per cent;
- ▶ License fee \$5 per game or table; and
- ▶ No restriction on age.

***Video Lottery Terminals***

- ▶ ALC administers VLTs for the Province.

***First Nations Gaming***

- ▶ There is no First Nations Gaming in Newfoundland and Labrador.

## **PRINCE EDWARD ISLAND**

### **Agencies Involved**

- ▶ Department of Community Services & Attorney General for Charitable Gaming; and
- ▶ P.E.I. Lotteries Commission for Government Gaming.

### **Charitable Licensing**

- ▶ "Charitable object or purpose means" any object for:
  - ▶ the relief of poverty;
  - ▶ education;
  - ▶ advancement of religion; or
  - ▶ any purpose beneficial to the community

### **Specific Gaming Activities**

- ▶ Enabling legislation includes: the Lottery Schemes Order; Lotteries Commission Act; and Video Lottery Scheme Regulations.

#### ***Bingo***

- ▶ Number of charitable licenses is 43 (no commercial licenses);
- ▶ Types of bingo games played include traditional and media bingos;
- ▶ Maximum prize value per 24 hours is \$5,500;
- ▶ Maximum prize for any one game is \$2,000;
- ▶ Regular games shall not exceed \$75;
- ▶ Accumulating jackpots shall not exceed \$2,000 and each increase shall not exceed \$200;
- ▶ Total guaranteed prizes, excluding the jackpot, at any bingo event shall not exceed \$3,500; and
- ▶ The total value of all prizes plus operating expenses in any month will not exceed 85 per cent of gross receipts in the case of a bingo whose yearly projected aggregate value of prizes exceeds \$100,000 OR not exceed 90 per cent if the yearly aggregate value of prizes does not exceed \$100,000.

#### ***Raffles, Cash Lotteries, 50/50 Draws***

- ▶ There are 432 licenses with prize values less than \$250 and 483



licenses with prize values over \$250 were issued during the fiscal year of April 1, 1998, to March 31, 1999.

- ▶ Government-run ticket lotteries are under the P.E.I. Lotteries Commission.

#### **Regulatory Requirements**

- ▶ Proceeds from lottery must be kept separate from other funds.
- ▶ If the prize limit is greater than \$250, all winners' names must be reported to Community Affairs.
- ▶ A public advertisement of the winner's name is required if the prize is greater than \$1,000.
- ▶ The license number must appear on all tickets where the prize value is greater than \$1,000.
- ▶ If a prize remains unclaimed for six months after a draw, another draw shall be made. If, after 90 days, the prize is still unclaimed, the value of the outstanding prize shall be included in the proceeds for the charity.
- ▶ When an event is being run by a paid, professional fundraiser, the licensee shall disclose the participation of the fundraiser in all print advertising and on the tickets.
- ▶ Proceeds of licensed gaming must only be spent on the objectives specified in the application as approved.

#### **Casinos**

- ▶ There are no casinos in Prince Edward Island.

#### **Video Lottery Terminals**

- ▶ As of April 1999 there was 417 VLTs at 94 locations in Prince Edward Island.
- ▶ Siteholder receives 20 per cent of net proceeds after payment of all taxes.
- ▶ Age restriction is 19 years.
- ▶ Premises licensed for the sale of liquor and ferries operated by Northumberland Ferry Service are subject to site restrictions
- ▶ VLTs are available for play between 11 a.m. and midnight due to time restrictions.

#### **First Nations Gaming**

- ▶ There are no agreements with First Nations Bands.

## **YUKON**

### **Agencies Involved**

- ▶ Consumer Services, Department of Justice, is the regulating body of the Lottery Licensing Act in the Yukon. The Yukon Lottery Commission controls such things as 649, Break-open tickets, and scratch tickets.

### **Charitable Licensing**

- ▶ Organizations dedicated to charitable activities such as relief of poverty, advancement of education, advancement of religion and advancement of other objects beneficial to the community as a whole.

### **Specific Gaming Activities**

- ▶ Enabling legislation includes: the Lottery Licensing Act; Bingo Regulations; Raffle Regulations; and Casino Regulations.

#### ***Bingo***

- ▶ There are approximately 64 charitable licensees, and no commercial licensees.
- ▶ Games played include: traditional and radio bingo.

#### **Regulatory Requirements**

- ▶ No organization can be given a license to run a bingo for more than 104 days in a year.
- ▶ Only the expenses necessary for running the bingo can be deducted from the revenue of the bingo.
- ▶ Of the balance left after subtracting from the revenue from the bingo the amount the bingo operator paid for prizes, at least 25 per cent must be spent on charitable or religious purposes as set out in the license.

House rules must be established and describe how the bingo will be run. (Examples: how the games will be called, how they will be recorded, how errors in calling will be dealt with, how disputes about winning cards or calls will be resolved, and how prizes will be awarded).

### ***Raffles***

- ▶ There are approximately 125 charitable licensees.
- ▶ The Yukon Lottery Commission is responsible for government-run ticket lotteries (Break-opens).

#### **Regulatory Requirements**

- ▶ Only the expenses necessary for running a raffle can be deducted from the revenue of the raffle.
- ▶ The proceeds remaining after deducting the allowable expenses must be spent on the purposes set out in the license.
- ▶ If the total retail value of prizes exceeds \$5,000 a financial guarantee must be provided.

### ***Casinos***

- ▶ Klondike Visitors' Association operates a charitable casino during the tourism seasons in Dawson City.
- ▶ There are no government-operated casinos and there are no casinos which operate on a regular basis.
- ▶ Breakdown of table games and slot machines per casino: 13 blackjack tables; two wheel of fortune; three roulette wheels; three red dog tables; two poker tables; and a predetermined number of slot machines.

#### **Regulatory Requirements**

- ▶ People under 19 years of age must not be allowed to play any games.
- ▶ The betting limits stated on the license must not be exceeded.
- ▶ House rules for blackjack must be established and describe how the games will be played, the betting limits, and the payoff odds.

### ***Video Lottery Terminals***

- ▶ There is no legislation allowing for the operation of VLTs in the Yukon.

### ***First Nations Gaming***

- ▶ There is no distinction made between First Nations gaming and any other gaming in the Yukon.

## **NORTHWEST TERRITORIES**

### **Agencies Involved**

- ▶ At present, within the Northwest Territories, the Government of the Northwest Territories has overall responsibility for lotteries. As part of the community empowerment strategy, this authority has now been delegated to 23 of the 32 communities within the Northwest Territories.
- ▶ All gaming is administered by Consumer Services, Community Operations, Municipal and Community Affairs, #500 5201-50th Avenue, Yellowknife, NT X1A 3S9.

### **Charitable Licensing**

- ▶ Organizations which are licensed include those which list as their objectives:
  - ▶ Promotion of the relief of poverty or disease;
  - ▶ Promotion of the advancement of religion or education; or which
  - ▶ Are of a charitable or religious nature and beneficial to the community as a whole.

### **Specific Gaming Activities**

- ▶ Enabling legislation includes: the Lotteries Act and the Lotteries Regulations.
- ▶ In the case of delegated municipal governments, by-laws are passed based on the Act and Regulations and a similar system is implemented at the municipal level.

### ***Bingo***

- ▶ In 1998/99 116 bingo licenses were issued to charitable or religious organizations only.
- ▶ At present, traditional, radio and television bingo are licensed. Inter-jurisdictional events are not permitted.

#### **Regulatory Requirements**

- ▶ No prize or combination of prizes over \$30,000 is allowed without the approval of the Minister.
- ▶ Prizes in excess of \$100,000 require an independent audit of the

financial records within 90 days.

- Restrictions on liquor as a prize.
- No single organization can receive more than five licenses each six months and, of those licenses, only three may be series licenses.
- Groups are limited to one bingo per week.
- Charitable organizations must submit any changes within their Executive to Consumer and Corporate Affairs.
- Age restrictions may be applied to a license.
- Administrative expenses cannot total more than 10 per cent of the gross proceeds.
- Organizations must show a minimum 15 per cent profit.

#### ***Pull Tickets***

- In 1998/99 66 pull ticket licenses were issued to charitable or religious organizations only.
- At present, lottery activities within the Northwest Territories for Western Canada Lottery events (e.g., 6/49, scratch tickets) are administered by Sport North (a non-profit organization dedicated to the advancement of Sport within the Northwest Territories).

#### **Regulatory Requirements**

- No single organization can receive more than five licenses each six months and, of those licenses, only three may be series licenses.
- Groups are limited to one pull ticket license per week.
- Charitable organizations must submit any changes within their Executive to Consumer Services.
- Age restrictions may be applied to a license.
- Administrative expenses cannot total more than 10 per cent of the gross proceeds.
- Organizations must show a minimum 15 per cent profit on these events.
- License holders cannot sell left over ticket stocks without written permission of the Minister.

#### ***Casinos***

- Casino licenses are issued to charitable or religious organizations in a fashion similar to the awarding of a bingo or pull ticket license.

- In 1998/99 nine casino licenses were issued to charitable or religious organizations only.
- No permanent casino facilities exist in the Northwest Territories.

#### **Regulatory Requirements**

- A license holder will only hold one license for a casino at any one time.
- Only one license will be issued every six months to an organization.
- Generally, only one casino is permitted to operate within a community at any given time. Provisions exist for special circumstances.
- A license shall not be issued for a period exceeding three days.
- The casino shall not operate between the hours of 12 midnight on a Saturday and 1:30 p.m. on Sunday.
- A minimum of 25 per cent of gross proceeds shall be set aside for a charitable or religious object or purpose.
- If the casino is held in conjunction with any other events (e.g., bingos), it shall be held in an area physically separated from the other lottery events.
- No person under the age of 19 is permitted in the casino area.
- Minimum and maximum bets must be clearly posted.
- Generally, only Blackjack, Roulette tables, and various types of "Wheel" games are licensed.

#### ***Video Lottery Terminals***

- No provisions exist within Territorial legislation allowing for this type of lottery scheme.
- The Government of the Northwest Territories considered this type of activity in 1992 and chose at that time not to introduce this form of gaming.

#### ***First Nations Gaming***

- No special provisions exist for "First Nations Gaming." Many of the Bands within the Northwest Territories utilize existing provisions under the legislation and run bingos, pull tickets, raffles, and casinos.

## NOTES FOR CHAPTER 5

- 1 Cohen, Richard, The Washington Post, (June 8, 1999). One Great Casino.
- 2 Statistics Canada, The Daily, (February 19, 1999). Computer communications by households.
- 3 Statistics Canada, The Daily, (February 19, 1999). Computer communications by households.
- 4 Productivity Commission, (July 1999). Australia's Gambling Industries, Draft Report, Canberra, p. 5.3, Box 5.2.
- 5 Currier, Chet, The Associated Press, (June 15, 1999). Day-Trading Not As Easy As Imagined.
- 6 National Gambling Impact Study Commission, (June 19, 1999). Final Report, Washington, D.C., p. 5-1.
- 7 National Gambling Impact Study Commission, (June 19, 1999). Final Report, Washington, D.C., p. 5-4.
- 8 Stevenson, Mark, Southam Newspapers., (February 25, 1999). The St. Catharines Standard, Canada Takes Lead in Internet Gambling.
- 9 Velotta, Richard, Las Vegas Sun, (June 25, 1999). Internet Casinos to Share Customer Information.
- 10 Velotta, Richard, Las Vegas Sun, (June 29, 1999). Internet Gambling Regulation Fees Vary Around the World.
- 11 Dominica Website, (1999). Internet Gaming Contract, <http://www.ibuoffshoredominica.dm/gaminglist.htm#contract>.
- 12 NORC Gambling Impact and Behavior Study, (1999). Citation of Cox, Lesieur, Rosenthal and Volberg (1997); Christiansen (1998), p. 3.

- 13 National Gambling Impact Study Commission, (June 19, 1999). Final Report, citation of NORC Gambling Impact and Behavior Study, Washington, D.C., p. 4.14.
- 14 National Gambling Impact Study Commission, (June 19, 1999). Final Report, citation of NORC Gambling Impact and Behavior Study, Washington, D.C., p. 8-1.
- 15 Productivity Commission, (July 1999). Australia's Gambling Industries, Draft Report, Canberra, Summary (xxvii).
- 16 Nova Scotia Alcohol and Gaming Authority, (1999). National Gambling Impact Study Commission comparison chart and Australia Draft Report comparison chart, Annual Report 1998/99 appendices.
- 17 Rutherford, James, Casino Journal (January 1999). Riding the Wave.
- 18 International Gaming and Wagering Business, (February 1999). 1999 European Casino Report.
- 19 International Gaming and Wagering Business, (February 1999). 1999 European Casino Report.
- 20 Casino Journal's National Gaming Summary, (March 22, 1999). Slot Giants Fuel Consolidation Trend.
- 21 Casino Journal, (April 1999). Park Place Risks the Cost of Innovating Games, p. 85.
- 22 Slot Manager, International Gaming and Wagering Business, (Summer 1999). Slingo Hits Park Place, p. 6.
- 23 Slot Manager, International Gaming and Wagering Business, (Summer 1999). Slingo Hits Park Place, p. 6.
- 24 Nova Scotia Gaming Corporation, (March 31, 1999). Annual Report, p. 24.



- 25 Grochowski, John, Slot Manager, International Gaming and Wagering Business, (October 1998). Slot Floor of the Future.
- 26 Strow, David, Las Vegas Sun, (June 23, 1999). Coinless Slots Are Seen as Wave of Future.
- 27 Kiddoo, David, Public Gaming International, (March 1999). The Bingo Boom: Technology Teaches An Old Game New Tricks.
- 28 Kiddoo, David, Public Gaming International, (March 1999). The Bingo Boom: Technology Teaches An Old Game New Tricks.
- 29 McQueen, Patricia A., International Gaming and Wagering Business, (May 1999). On the Upswing, p. 39.
- 30 Public Gaming International, (December 1998). Lottery Year in Review, p. 8.
- 31 McQueen, Patricia A., International Gaming and Wagering Business, (March 1999). Winning Combinations, p. 55.
- 32 McQueen, Patricia A., International Gaming and Wagering Business, (July 1999). Euro Lotteries Join Forces, p. 1.
- 33 Ward, Kathleen, Public Gaming International, (September 1998). Lotteries Address Responsible Play, p. 33.
- 34 Ward, Kathleen, Public Gaming International, (March 1999). The World's Game. Connecting to International Lottery Web Sites, p. 15.
- 35 Canadian Gaming News, (June 1999). Loto-Quebec Looking at CD ROM Games, p. 1.
- 36 International Gaming and Wagering Business, (June 1999). EGMs Make Waves in Europe, p. 34.
- 37 National Gambling Impact Study Commission, (June 19, 1999). Final Report, Washington, D.C., pp. 7-30, Recommendation 7-4.

- 38 National Gambling Impact Study Commission, (June 19, 1999). Final Report, Washington, D.C., pp. 7-10 and 7-11.
- 39 Court of Queen's Bench of Alberta, Judicial District of Edmonton, (March 4, 1999). Oil Sands Hotel (1975) Ltd. v Alberta Gaming and Liquor Commission.
- 40 Court of Queen's Bench of Alberta, Judicial District of Edmonton, (March 4, 1999). Oil Sands Hotel (1975) Ltd. v Alberta Gaming and Liquor Commission, subsection 39.
- 41 Court of Queen's Bench of Alberta, Judicial District of Edmonton, (March 4, 1999). Oil Sands Hotel (1975) Ltd. v Alberta Gaming and Liquor Commission, subsection 57.
- 42 Court of Queen's Bench of Alberta, Judicial District of Edmonton, (March 4, 1999). Oil Sands Hotel (1975) Ltd. v Alberta Gaming and Liquor Commission, subsection 62.
- 43 The Times-Picayune, (July 2, 1999). Video Poker Operators Bet on New Hearings, New Orleans.
- 44 Productivity Commission, (July 1999). Australia's Gambling Industries, Draft Report, Canberra, p. 3.3.
- 45 Productivity Commission, (July 1999). Australia's Gambling Industries, Draft Report, Canberra, p. 3.1.
- 46 International Gaming and Wagering Business Magazine, (February 1999). 1999 European Casino Report.
- 47 International Gaming and Wagering Business, (November 1998). VLT Image is Everything, p. 46.
- 48 International Gaming and Wagering Business, (November 1998). VLT Image is Everything, p. 46.

- 49 Sterling Research Incorporated (1998). Report Synopsis, Nova Scotia Alcohol and Gaming Authority Annual Report, 1997/98 Chapter 3, p. 57.
- 50 National Gambling Impact Study Commission, (June 19, 1999). Final Report, Washington, D.C., p. 3-9.
- 51 Cited by The Wager, Vol. 2, Issue 31, (August 5, 1997). <http://www.thewager.org>.
- 52 National Gambling Impact Study Commission, (June 19, 1999). Final Report, Washington, D.C., pp. 3-10.
- 53 National Gambling Impact Study Commission, (June 19, 1999). Final Report, citation from The Extent and Nature of Gambling Among College Student Athletes, Michael E. Cross and Ann G. Vollano, University of Michigan Athletic Department, 1999, pp. 3-10.

## RECOMMENDATIONS

Under terms of the *Gaming Control Act*, the Nova Scotia Alcohol and Gaming Authority (the Authority) is responsible for preparing each year a report that includes recommendations to the Minister concerning any changes that should be made to the *Act* or the regulations to "correct any defect, abuse, illegality or criminal activity in relation to casinos and other lottery schemes."

Given the Authority's mandate to study the operation and administration of gaming within and outside the Province and the social, health, justice, economic and environmental impacts of same, and given that the *Act's* stated purpose includes ensuring that gaming is conducted in a socially responsible manner, in the best interests of the public and "to minimize the opportunities that give rise to problem gambling," the Authority respectfully recommends to Government:

1. That Government endorse amendments to the Video Lottery Regulations as prepared by the Alcohol and Gaming Authority and that those amendments specifically include, but not necessarily be restricted to, measures that require:
  - all new video lottery terminals in the Province to display actual money spent/played instead of, or in addition to, credits;
  - all new machines be equipped for use of an Authority-approved tracking device that allows voluntary use of equipment capable of alerting a player of the time and money spent during play;
  - all VLT retailers adapt their premises to discourage problem or inappropriate gaming practises by creating a specific gaming area, keeping that area well lit, and placing in it a prominently displayed clock.

Evidence indicates that some seemingly simple measures may help mitigate problem video lottery play by altering public awareness. For example, machines that currently display only the "credits" may be disguising the real amount of money being played. Placing actual dollar amounts directly on the screen takes away any potential for confusion. A voluntary system that allows players to quickly determine exactly how long they have been playing and how much money they spent could help players who may be concerned that they lose themselves in the process of play. The prominent placement of a clock in the gaming area likewise could provide problem players with another reality check, enabling them to be aware not only of the passage of time but, again, of how long they have been in the playing area.

**2. That the Alcohol and Gaming Authority develop and the Province adopt standards for the control of advertising and marketing of government-operated gaming activities. These advertising and marketing regulations should include, but not be restricted to, measures that:**

- ▶ **better publicize the odds/probabilities of winning;**
- ▶ **require minimum standards regarding publication of information on problem gambling;**
- ▶ **forbid the targeting of youth.**

The Authority's desire for more substantive regulation of gaming advertising is not new. The need for greater accountability regarding advertising and promotions of lottery products was addressed in the then Nova Scotia Gaming Control Commission's first annual report in 1995/96, and has been included in each subsequent edition. In its 1996/97 recommendations, for example, the Authority again expressed concern: "about the lack of a gaming industry standard of acceptable marketing practises. Without such a standard, advertising and promotion of gaming activity may be impacting on inappropriate segments of the population, including minors."

The Alcohol and Gaming Authority is not alone in its concern. The National Gambling Impact Commission in the United States has issued a series of recommendations aimed at ensuring, for example, that advertising and marketing schemes do not target vulnerable audiences. Although

marketing of gaming, like all other advertising, is subject to the general terms and complaint mechanisms included in Advertising Standards Canada's code of advertising, even the North American Association of State and Provincial Lotteries has acknowledged the need for industry-specific standards. It recently developed a voluntary code of conduct for its members. That is a welcome start. By expanding and formalizing such principles, government can further the process. Regulations, for example, that require minimum standards regarding publication of information on problem gambling may include something as simple as the prominent posting of the Problem Gambling Hotline telephone number on ALC lottery terminals or a provision that one responsible gambling message be featured for every certain number of traditional media advertisements. By better monitoring the process of advertising and marketing, Government can better make the public aware that all gaming activity should be considered entertainment, not a get-rich quick scheme.

3. **That regulations under the *Gaming Control Act* affecting the Voluntary Self Exclusion Program be amended to include: a time limit on the exclusion and the elimination of the appeal process, and provisions that all persons engaging in the process waive rights to any prize winnings should they breach their undertaking and place wagers while excluded. Further, the Alcohol and Gaming Authority recommends that the potential for introducing a voluntary self exclusion program for other gaming activities be fully explored.**

Casino Regulations currently allow any person who has entered the formal Voluntary Self Exclusion process to be asked to leave casino premises if they are identified by casino personnel. Photographs of excluded persons are taken to help casino personnel identify these individuals. The Voluntary Exclusion Agreement lasts indefinitely and can only be lifted by the Alcohol and Gaming Authority after a successful hearing process.

From a logistical standpoint, the absence of time limits may hamper the very point of the program: appearances change, photographs become outdated and people leave the Province, yet their photos remain on file and casino personnel are challenged to keep them all committed to memory. By introducing a time limit (perhaps of two or three years), an amended

regulation would place more practical onus on the casino and its personnel to keep excluded patrons from the premises. The elimination of the appeal process could further ensure that those who seek out the exclusion process understand that this is a serious commitment, something that cannot be undone for two full years. An amendment that requires excluded patrons to waive their winnings, meanwhile, would further dissuade breaches of the undertaking by removing the financial incentive for play.

The Alcohol and Gaming Authority is also concerned that certain activities appear to have been subject to regulatory measures aimed at curbing problem play but others have not. While the introduction of some form of a voluntary self exclusion process for other gaming activities may not take the same specific shape as the casino process, there may be ways of adopting the overall principle. For example, measures aimed at keeping problem players from video lottery, traditional lottery or bingo play could never keep those individuals from all such establishments. Individual agreements might, however, be enough to discourage a problem player from frequenting a favourite establishment. Obviously, this may be easier said than done and such practical implications as enforceability, liability and operator concerns must be fully explored and addressed.

**4. In an effort to better address concerns over problem gambling, the Province should:**

- ▶ **provide annual publication of a full accounting for revenues and expenditures related to problem gambling treatment and research;**
- ▶ **develop and implement an awareness/education campaign to make consumers aware of the common myths and misconceptions for all gambling activities;**
- ▶ **develop standards and measures to test the efficacy, availability and outcome of problem gambling treatment providers;**
- ▶ **encourage manufacturers and suppliers of all gaming-related materials to provide evidence of their development of, and attempts to incorporate, policies that preclude problem gambling.**

The Alcohol and Gaming Authority continues to be dismayed by the apparent lack of focus of efforts aimed at preventing problem play and assisting problem gamblers. Worthwhile programs are addressing varying needs but a system of overall accountability and co-ordination would help Nova Scotians better understand what is being done and would help policy makers identify areas being missed. To better assure the effectiveness of such efforts, the Authority is suggesting a number of specific measures.

First, the Alcohol and Gaming Authority continues to have concerns over the expenditures of time and money on the issue of problem gambling. Taxpayers deserve a full and accurate accounting of all of Government's efforts to combat problem play. This can be done simply, by requiring each Department or Agency to submit, for publication, a full accounting to its minister as part of the annual budgetary process.

Government departments are not alone in the fight, however. The public also needs to be made a more active part of the process. By educating the population about the myths and misconceptions of everything from the mathematical odds of winning a lottery to whether a VLT machine "is due" for a win, Government can help people identify and control gambling-related at-risk behaviour.

Meanwhile, while debate continues over the extent of problem gambling and even its definition, there is no question that some people are suffering its real consequences. These individuals are seeking help in a variety of places from a variety of caregivers and yet no assessments have been made or standards developed to determine the viability or outcome of such programs. To help protect already troubled individuals, practical measures need to be developed to allow users to make informed decisions about treatment programs and counselling methods.

Indeed, the Alcohol and Gaming Authority believes all those involved in the gambling industry have an obligation to help fight against problem gambling. As the Australia Productivity Commission noted in its draft report on Australia's Gambling Industries, a wide range of options may help reduce the risk for problem players without overtly affecting the outcome for recreational or social users. The Nova Scotia Gaming Corporation made a commendable start in this process by seeking industry input on problem gambling in its recent request for proposals for new video



lottery machines. Industry players can do more than fine-tune money-making trends, they can and should be encouraged to identify measures that can help minimize the potential risks of their products.

**5. That research projects be co-ordinated by the Alcohol and Gaming Authority, with the assistance and co-operation of all other departments and agencies of Government.**

Further to the Authority's concern over the apparent lack of focus in dealings regarding gaming is the ongoing concern with regard to co-ordination of research programs. The Alcohol and Gaming Authority has, as its dual mandate under the *Gaming Control Act*, the obligations to regulate gaming and to conduct research into ongoing effects of gambling in Nova Scotia. It is the only agency with those mandates. Obviously, other departments also have vested interest in singular effects of the industry at large. The Nova Scotia Department of Health, for example, has rightful interest in the physical and mental health effects on residents and the Gaming Corporation has a critical interest in the financial well-being of its coffers. It is understandable and, indeed, crucial that departments and agencies be well versed in the intricacies of gaming pertinent to their mandates.

That being said, the Alcohol and Gaming Authority continues, as in past years, to be concerned by a lack of communication and consultation among these players. A responsible gaming initiative is researched and developed without the input of regulatory staff, a research program is developed and put in motion but no progress reports are available. At the risk of making itself vulnerable to charges that it is attempting to protect territory, the Alcohol and Gaming Authority is again recommending that it be made the central repository for all gaming-related initiatives and that all departments and agencies, including but not exclusively, the Gaming Foundation, the Gaming Corporation and the Health Department, be required to advise and consult with the Authority regarding any research initiatives. The Alcohol and Gaming Authority believes the study of gaming and treatment of problem play must be consultative in order to avoid duplication of effort and to ensure that research initiatives are focused in worthy areas. Where goodwill has not been enough to streamline and make efficient these endeavours, process might.

**6. That First Nations Bands be encouraged to publish and release audited financial statements annually.**

The Alcohol and Gaming Authority recognizes that Native gaming does not fall within its jurisdiction. It is not suggesting that it should. But gaming activity on First Nations' sites is not exclusively offered to members of First Nations and the Authority has a difficult time fully assessing gaming's impacts on the Province when a large portion of the industry remains unaccounted for by Government. For the good of all residents, the Province should do all it can to ensure public reporting by the Gaming Commissions involved in First Nations with which it has gaming agreements.

**7. The Province of Nova Scotia should consider the introduction of measures aimed at better regulating Internet gaming within its borders.**

Although currently prohibited by provisions of the *Criminal Code of Canada*, Internet gaming is becoming a pressure that governments ignore at their peril. Only recently, Prince Edward Island was placed in a difficult position when a provider requested permission to establish online gaming within its jurisdiction. One First Nations band in Canada, meanwhile, is developing a First Nations' Internet gaming site.

Already, researchers worry that Internet gaming may provide the kind of anonymity and uninterrupted play that problem gamblers seek. Others are concerned about the prospect of youngsters accessing casinos, of unscrupulous companies taking advantage of vulnerable members of the population and other security issues. In the United States, where a ban of Internet gaming is being considered and vocally debated, there are also concerns that prohibition is unenforceable and may lead to further entrenchment of unregulated underground markets. To deal effectively with these and other concerns, Nova Scotia can prepare in advance by developing a regulatory regime that protects the interests of the public and that can be ready for implementation if and when it is needed.



# Appendix A

**A SURVEY OF THE PREVALENCE AND PERCEPTIONS OF  
GAMING IN NOVA SCOTIA, 1999**





## TABLE OF CONTENTS

INTRODUCTION .....	1
PROVINCIAL OVERVIEW OF INVOLVEMENT IN GAMING ...	2
Regional Profile .....	3
Halifax County .....	3
Cape Breton County .....	4
Rest of Province .....	4
Total Adults' Involvement in Gaming .....	8
Number & Type of Different Games Played .....	8
Expenditures .....	9
Time Spent Playing .....	9
Player Segmentation .....	11
Gambling by Children .....	14
Regional Differences .....	15
Gender Differences .....	16
Age Differences in Gaming .....	18
Income Differences in Gaming .....	20
PARTICIPATION IN GAMING ACTIVITIES .....	25
Participation in Lottery Ticket Play .....	26
Bingo .....	36
Bingo in Bingo Halls .....	38
TV Bingo .....	38
Video Lottery .....	40
Attendance at a Casino in the Past Year .....	42
Slot Machines at a Casino .....	44
Casino Table Games .....	45
Participation at the Halifax Casino .....	46
Participation at the Sydney Casino .....	47

## TABLE OF CONTENTS (Continued)

ATTITUDES TOWARDS GAMBLING .....	49
Opposition to Gambling in Nova Scotia .....	49
Opposition to Casinos in Nova Scotia .....	51
Opposition to VLT's .....	53
Opposition to Bingo .....	55
Opposition Towards Lottery Tickets .....	57
Opposition Towards Charity/Non-ALC Lotteries & Draws in Nova Scotia, 1999 .....	59
Comparative Analysis of Opinions Towards the Five Gambling Option .....	61
Strength of Relationships Between Opposition to Gambling & Approval of Various Gambling Activities .....	62
APPROVAL OF ABM'S IN GAMBLING ESTABLISHMENTS ...	63
APPROVAL OF VLT BILL ACCEPTORS & PLAYER CARDS ...	66
Approval of Bill Acceptors - By Region, Gender, Age, Income & VLT Play .....	67
Approval of VLT Player Cards - By Region, Gender, Age, Income & VLT Play .....	69
EVALUATION OF VOLUNTARY EXCLUSION PROGRAM ....	70
Awareness of Voluntary Exclusion Program .....	70
APPROVAL OF VOLUNTARY EXCLUSION PROGRAMS .....	72
Approval of Voluntary Exclusion Programs .....	73
AWARENESS OF PROBLEM GAMBLING .....	75
Perceived Prevalence of Problem Gambling .....	75
Exposure to Problem Gambling .....	80
Regional Differences .....	84
Other Demographic Differences .....	87

## **TABLE OF CONTENTS (Continued)**

<b>AWARENESS &amp; USE OF PROBLEM GAMBLING SERVICES</b>	<b>.. 88</b>
---	--------------

<b>ATTITUDINAL STATEMENTS</b>	<b>91</b>
-------------------------------	-----------

Factor 1 - Problem Gambling Education, Information & Assistance	91
Factor 2 - Gambling Benefits	94
Factor 3 - Restricted Access & Advertising	96
Factor 4 - Gambling as a High Risk Behaviour	98
Factor 5 - Other	99

<b>KNOWLEDGE &amp; INTEREST LEVELS FOR SPECIFIC ISSUES</b>	<b>102</b>
--	------------

<b>ISSUE PRIORITIES FOR THOSE VERY INTERESTED</b>	<b>107</b>
---	------------

<b>METHODOLOGY</b>	<b>109</b>
--------------------	------------

Questionnaire Design	109
Sampling	110
Weighting	111
Data Collection	113
Completion Results	114

### **APPENDICES:**

- Appendix A - Survey Instrument**
- Appendix B - Data Tables**



## TABLE OF FIGURES

Figure 1 - Regional Profile .....	3
Figure 2 - Percentage of Adults in Atlantic Canada Involved in Any Gaming .....	8
Figure 3 - Percentage of Total Time Spent Gambling .....	10
Figure 4 - Segment Profile .....	11
Figure 5 - Regular Player Expenditures .....	12
Figure 6 - Percentage of Expenditure Contributed by Regular Versus Casual Play .....	13
Figure 7 - Trial of Gambling by Children in Household .....	15
Figure 8 - Amount Spent Per Month on Gaming .....	17
Figure 9 - Number of Games Played by Age .....	19
Figure 10 - Average Number of People/Household by Income .....	21
Figure 11 - General Gaming Patterns .....	22
Figure 12 - Trial & Play in the Past Year of Lottery Tickets .....	27
Figure 13 - Frequency of Playing Each Type of Lottery Game in the Last Year .....	28
Figure 14 - Continued Adoption Rates for Lottery Ticket Games ...	31
Figure 15 - Frequency of Playing Bingo in the Past Year .....	36
Figure 16 - Frequency of Playing VLT's in the Past Year .....	40
Figure 17 - Continued Adoption Rates for Slot Machines at the Halifax & Sydney Casinos .....	43

## TABLE OF FIGURES (Continued)

Figure 18 - Frequency of Playing Slot Machines at the Halifax & Sydney Casinos Among Players .....	45
Figure 19 - Played Casino Games at the Halifax Casino in the Past Year .....	46
Figure 20 - Played Casino Games at the Sydney Casino in the Past Year .....	48
Figure 21 - Opposition to Gambling in Nova Scotia .....	49
Figure 22 - Attitudes Towards Casinos in Nova Scotia, 1997-1999 ..	51
Figure 23 - Attitudes Towards VLT's in Nova Scotia, 1997-1999 ...	53
Figure 24 - Attitudes Towards Bingo in Nova Scotia, 1997-1999 ...	55
Figure 25 - Attitudes Towards Lottery Tickets in Nova Scotia, 1997-1999 .....	57
Figure 26 - Attitudes Towards Charity/Non-ALC Lotteries & Draws in Nova Scotia, 1999 .....	59
Figure 27 - Levels of Approval for Varieties of Gambling .....	61
Figure 28 - Strength of Relationships Between Opposition to Gambling & Approval of Various Gambling Activities ....	62
Figure 29 - Approval of ABM's in Gambling Establishments .....	64
Figure 30 - Approval of VLT Bill Acceptors & Player Cards .....	66
Figure 31 - Approval of VLT Bill Acceptors by VLT Play in the Last Month .....	68
Figure 32 - Approval of VLT Player Cards by VLT Play in the Last Month .....	69

## TABLE OF FIGURES (Continued)

Figure 33 - Awareness of Voluntary Exclusion Program in Nova Scotia .....	70
Figure 34 - Approval of Voluntary Exclusion Programs .....	73
Figure 35 - Awareness of the Percentage of Nova Scotians Who Are Problem Gamblers .....	76
Figure 36 - Percentage of Nova Scotians Who Are Perceived to be Problem Gamblers (Total Adults) .....	77
Figure 37 - Perceptions of the Prevalence of Problem Gamblers by Region .....	78
Figure 38 - Perceptions of the Prevalence of Problem Gambling by Income Category .....	79
Figure 39 - Personal Awareness of a Past or Present Problem Gambler (Total Adults) .....	80
Figure 40 - Relationship to Problem Gambler (Total Adults) .....	81
Figure 41 - Personal Awareness of a Problem Gambler in Nova Scotia by Age .....	87
Figure 42 - Awareness of Any Assistance or Problem Gambling Services .....	88
Figure 43 - Interest Levels for the Various Issues (Total Adults) ...	105

## TABLE OF TABLES

Table 1 - Provincial Overview of Participation in Gaming .....	6
Table 2 - Average Monthly Expenditures on Lottery Tickets .....	33
Table 3 - Average Annual Expenditures on Casino Gaming .....	43
Table 4 - Play for Casino Games in the Last Year by Approval of Casinos .....	52
Table 5 - Play for VLT Games in the Last Year by Approval of VLT's, 1999 Only .....	54
Table 6 - Play for Bingo (in Bingo Halls and/or TV/Satellite Bingo) in the Last Year by Approval of Bingo, 1999 Only .....	56
Table 7 - Play for Lottery Tickets Games in the Last Year by Approval of Lottery Tickets, 1999 Only .....	58
Table 8 - Play for Charity/Non-ALC Lotteries & Draws in the Last Year by Approval of Charity/Non-ALC Lotteries & Draws, 1999 Only ...	60
Table 9 - Types of Gaming Associated with Problem Gambling ....	83
Table 10 - Types of Gaming Associated with Problem Gambling by Region .....	85
Table 11 - Problem Gambling Education, Information & Assistance .	92
Table 12 - Gambling Benefits .....	94
Table 13 - Restricted Access & Advertising .....	96
Table 14 - Gambling as a High Risk Behaviour .....	98
Table 15 - Other .....	99
Table 16 - Knowledge & Interest (Total Adults) .....	103



## INTRODUCTION

The foremost responsibilities of the Nova Scotia Alcohol & Gaming Authority related to provincial gaming and gaming activities are as follows:

- 1) "To license and regulate all gaming activities in the province so as to ensure these activities are conducted with honesty and integrity while taking into account the social and economic interests of Nova Scotians;" and
- 2) "To study and objectively report on certain aspects of gaming in Nova Scotia, including the public's interest and reaction to gaming in addition to the impacts that gaming has on the social, economic, health, justice and environmental milieu."

Pursuant to the latter area of responsibility, the Nova Scotia Alcohol & Gaming Authority is required to "continuously study public opinion and reactions among residents of Nova Scotia to existing and potential features of gaming in the province" and to make the findings of such studies available to the citizens of Nova Scotia each year. The research is intended to be used by the Authority, and Nova Scotians in general, to answer fundamental questions about the gaming industry in Nova Scotia using empirically based information.

In order to meet their objectives, the Alcohol & Gaming Authority launched the **Survey of the Prevalence & Perceptions of Gaming in Nova Scotia** in 1996 as a means of collecting benchmark behavioural and attitudinal measures. These preliminary measures form the basis for which future studies could monitor the response of Nova Scotians towards provincial gaming and gaming activities.

In 1997 and 1998, the initial study was replicated. As part of their on-going commitment to monitor and report on the impact that gaming and gaming activities has had on the general population of Nova Scotians, the Authority contracted the services of Focal Research Consultants Ltd. to undertake the latest annual wave in the Survey of the Prevalence & Perceptions of Gaming in Nova Scotia. This survey marks the fourth data point in this on-going initiative.

The specific objectives of the Alcohol and Gaming Authority's research are as follows:

Compare and analyze the data collected concerning perceptions and attitudes towards gambling and Casinos, VLTs, Lottery Tickets, and Bingo. More specifically, the research systematically studies the following:

- 1) Participation and involvement in gaming;
- 2) Level of opposition towards gaming in general, and opposition towards VLTs, casinos, bingos and lottery tickets;
- 3) Response towards specific issues related to gaming regulations, including voluntary exclusion program, ABM's and gambling locations, and VLT modifications (i.e., bill acceptors, VL player cards);
- 4) Awareness of exposure to problem gambling;
- 5) Level of awareness of programs to assist problem gamblers;
- 6) Attitudes and perceptions towards gaming;
- 7) Knowledge and interest levels for additional information on gambling related issues.

The research also explores and tests the empirical relationships between attitudes and perceptions, and social, economic and demographic factors. All reported results are significant at the 95% confidence level ( $p < .05$ ), unless otherwise specified for exploratory purposes.

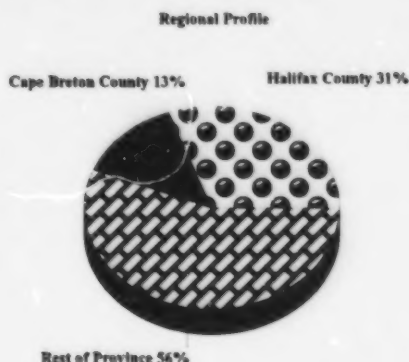
## **PROVINCIAL OVERVIEW OF INVOLVEMENT IN GAMING**

A general overview of adults' involvement in gaming in Nova Scotia was undertaken to position the survey findings within the context of gambling behaviours at large in the population.

Specifically, adults' gaming behaviours, including participation rates and expenditures, were examined at a total provincial level and for the regional and demographic segments identified by the researchers at Nova Scotia Alcohol & Gaming Authority (NSAGA).

## Regional Profile

**Figure 1**



Given geographic, socioeconomic and demographic considerations, NSAGA wished to examine and compare results over three regions: Halifax County (n=179), Cape Breton County (n=83) and Rest of Province (n=338). There are certain demographic differences among the three regions which are impacting the survey results. Therefore, a demographic profile of each region is presented to

facilitate the assessment of regional variations in responses.

### Halifax County

- represents approximately 31% of survey respondents;
- tends to have a higher proportion of men than anywhere else in the province (54% versus 45 - 48%);
- age is skewed younger, with approximately 40% under 35 years of age versus approximately 25% elsewhere in Nova Scotia. Only 20% are 55 years or older;
- the average age in Halifax County is significantly lower, at 41 years of age;
- annual household incomes are skewed significantly higher, with 82% reporting incomes beyond \$25,000, as compared to 59% to 63% in the other regions. Household incomes beyond \$50,000 are noted by 39% of Halifax County residents, with 45% of all those with the highest incomes residing in Halifax County. Those with incomes above



\$70,000 are twice as high in Halifax County (16% versus  $\approx 7\%$ )<sup>1</sup>;

- education levels are also skewed higher, with 60% reporting post secondary school educations and 27% having university degrees;
- 65% are living in spousal relationships, with 26% single/never married and 9% currently separated/divorced/widowed;
- 39% have children under 19 years of age living at home;
- only 10% of adults in Halifax County live in a rural area, with the vast majority (90%) being urban residents.

### **Cape Breton County**

- represents approximately 13% of survey respondents;
- women comprise a larger proportion of adults living in this region, as compared to Halifax County (55% versus 46%);
- on average, Cape Breton County residents are older than in Halifax County (49 years versus 41 years of age), with a higher proportion of those 55 years of age or older (31%);
- incomes are skewed lower than anywhere else in the region. One-half of adults report annual household incomes under \$25,000, with one-third noting incomes of \$15,000 or less, as compared to 5% to 10% elsewhere in Nova Scotia;
- 69% have education levels of high school or less, with the lowest incidence of those having university degrees (10%);
- only notable difference in terms of marital status is a higher percentage of those widowed (13% versus  $\approx 4\%$ );
- 47% have children under 19 years of age living at home;
- 80% of adults in Cape Breton County (similar to Halifax County) live in an urban area.

### **Rest of Province (ROP)**

- represents approximately 56% of survey respondents;
- comprised fairly evenly of both men (48%) and women (52%);

---

<sup>1</sup>A similar proportion of adults in all regions (13%) refused or did not know their annual household incomes. For the purpose of this comparative analysis, missing values were excluded from the proportions to highlight differences among the three regions. More complex methods of income allocation can be undertaken, but typically do not yield significantly different results.

- similar to Cape Breton County, there is a higher proportion of older adults (55 years +) than in Halifax County (30% versus 20%), however, age falls more evenly over all the segments and, as a result, the average age in ROP is lower, at 46 years;
- incomes in the Rest of Province region are generally higher than reported in Cape Breton County and lower than reported in Halifax County. There is a higher proportion in the lower range of \$15,000 to \$25,000 in ROP than in Halifax County (24% versus 13%). Incomes also fall below that noted in Halifax County for annual household incomes beyond \$50,000 (22% versus 39%);
- adults living outside of Halifax and Cape Breton Counties tend to fall midway between the other two regions in terms of education. In general, adults have higher levels of post secondary educations than in Cape Breton County (45% versus 27%), but have lower levels of those with university degrees, as compared to Halifax County (17% versus 27%);
- adults in the Rest of Province are more likely to be married or living with a spouse or partner than in Cape Breton County (71% versus 59%);
- similar to Halifax County residents, 37% have children under 19 years of age living at home;
- two-thirds (66%) live in urban areas of Nova Scotia, which differs significantly from both Halifax and Cape Breton Counties.

**The profiles of the three regions in Nova Scotia differ significantly.**

**Adults in Halifax County tend to have a higher proportion of males, to be younger, to have higher annual household incomes, and higher education levels. As they live in the largest urban centre of Nova Scotia, Halifax County residents will have access to a local casino and the array of other gambling options available in the province.**

**Cape Breton County residents tend to be skewed more toward women, to be older than their counterparts in Halifax County, to have lower formal education levels and lower financial resources. Similar to those in Halifax, being in the second largest urban centre in Nova Scotia also**

exposes them to accessible casino gambling, as well as almost all other forms of gaming.

For adults in the Rest of Province, collectively, education, age and income all fall between the two extremes represented by the other areas. Adults in this region are more likely to be married and to live in rural communities, with an even mix of men and women represented. Access to particular forms of gambling, in some cases, will be less convenient (e.g., casinos).

These characteristics have implications for responses towards the various issues and behaviours measured in the survey.

**Table 1**

**Provincial Overview of Participation in Gaming (n=600)**

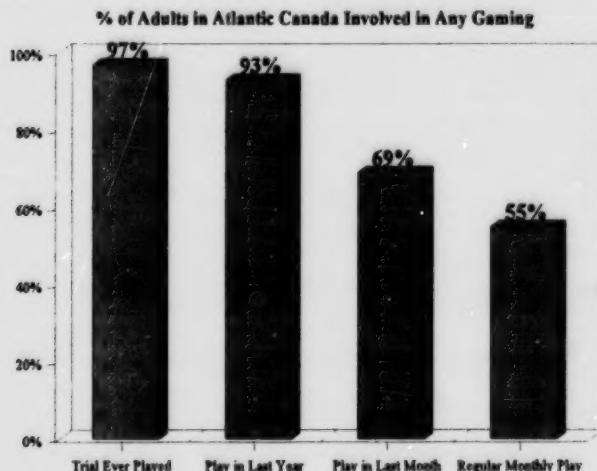
	<b>Ever Played (Trial)</b>	<b>Played in Last Year</b>	<b>Played in Last Month</b>	<b>Regular Play (1+/month)</b>
<b>Any Game of Chance</b>	<b>97%</b>	<b>93%</b>	<b>69%</b>	<b>55%</b>
<b>Lottery Tickets Overall</b>	<b>90%</b>	<b>85%</b>	<b>57%</b>	<b>50%</b>
Lottery Draws	84%	77%	47%	41%
\$2 Scratch 'n Wins	60%	54%	29%	21%
\$1 Scratch 'n Wins	38%	30%	9%	7%
50¢ Breakopens	27%	19%	10%	6%
Sport Select Proline	8%	6%	1%	2%
<b>Bingo Overall</b>	<b>38%</b>	<b>17%</b>	<b>6%</b>	<b>4%</b>
Bingo in bingo halls	36%	14%	5%	3%
TV Bingo	7%	5%	2%	1%
<b>Casinos Overall</b>	<b>50%</b>	<b>33%</b>	<b>9%</b>	<b>2%</b>

**Table 1 - Continued**

<b>Provincial Overview of Participation in Gaming (n=600)</b>				
	<b>Ever Played (Trial)</b>	<b>Played in Last Year</b>	<b>Played in Last Month</b>	<b>Regular Play (1+/month)</b>
<b>Casino Slot Machines Overall</b>	47%	31%	8%	2%
Slot Machines - Halifax	38%	24%	5%	1%
Slot Machines - Sydney	14%	9%	3%	1%
<b>Casino Table Games Overall</b>	11%	9%	2%	----
Table Games - Halifax	10%	8%	2%	----
Table Games - Sydney	2%	2%	----	----
<b>Video Lottery Terminals</b>	<b>30%</b>	<b>20%</b>	<b>9%</b>	<b>8%</b>
Sports Bets/Pools	13%	7%	2%	1%
Horse racing	10%	3%	1%	1%
Card Games for Money (non-casino)	27%	17%	7%	5%
Charity Raffle Tickets (non-ALC)	70%	64%	20%	9%
Internet Gambling	1%	<1%	----	----
Other Types of Betting	1%	1%	<1%	<1%

## Total Adults' Involvement in Gaming

Figure 2



**O v e r a l l**  
involvement  
in gambling  
and games of  
chance played  
for money is a  
widespread  
activity in  
Nova Scotia.  
Almost all  
adults (97%)  
have purchased  
and/or played  
at least one  
game of  
chance for a  
money prize at  
some time in

the past, with 93% having done so within the last year. In a given month, approximately 69% of adults will have been involved in some type of gaming; the majority of whom (80% or 55% of adults) engage in play on a regular, on-going basis of once a month or more.

### Number & Type of Different Games Played

On average, adults in the province have played five different games of chance in their lifetimes ( $\bar{x}$  = 4.8; median = 4.6). In the last year, three games were typically played ( $\bar{x}$  = 3.6; median = 3.0), while between one and two games of chance is the norm for the past month ( $\bar{x}$  = 1.5; median = 1.0). Nova Scotia adults typically play one game on a regular monthly basis ( $\bar{x}$  = 1.1; median = 1.0).

Play of lottery ticket games and, to a lesser extent, charity raffles and draws are driving the majority of the results at a total provincial level. Specifically, over 50% of adults have played the following games of chance in the last year: draw tickets such as Lotto 6/49; \$2.00 Scratch 'n Wins; and non-ALC raffle and draw tickets. In the case of the ALC games,

due to more even access to the products and on-going promotion and support, approximately half of all adults play these games in a given month (draws: 57%; Scratch 'n Wins: 47%), and on a regular monthly basis (draws: 50%, Scratch 'n Wins: 41%). Conversely, monthly (20%) and regular play (9%) for the charity tickets drops dramatically.

It is noteworthy that, in terms of trial, more adults in Nova Scotia have now visited the casino at some time in the past (50%) than have played either bingo (38%) or VLT's (30%). In fact, trial of slot machines (47%) alone exceeds that noted for all the other gaming options, exclusive of lottery tickets and charity draws. However, presumably due to distribution differences, the more widely available VLT's elicit significantly higher regular monthly playing patterns (VLT's: slots: 8% versus 2%).

### **Expenditures**

Nova Scotia adults, on average, spend approximately \$580.00 out-of-pocket each year on gaming ( $\bar{x}$  = \$576.94; median = \$102.59), or about \$50.00 each month ( $\bar{x}$  = \$48.08; median = \$8.55). Video lottery makes up the greatest proportion of reported annual gaming expenditures (39%), followed by ALC tickets and lotteries (31%), casino games (11%), bingo (11%), and charitable tickets and lotteries (4%)<sup>2</sup>. Less than 5% of annual gaming expenditures are allocated to other games of chance, including some non-regulated activities such as cards for money played outside a casino and Internet gaming.

### **Time Spent Playing**

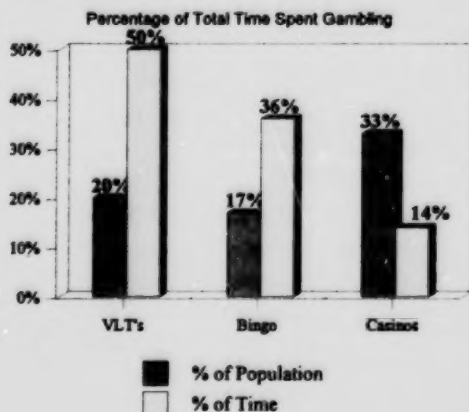
Estimates of time spent playing were only obtained for casino gaming, VLT's and bingo. Based on these measures it can be calculated that, on

---

<sup>2</sup>Due to small sample sizes, monthly gambling expenditures were capped at \$2,500.00 to minimize the impact of outliers on mean estimates. For gaming activities such as VLT's and casino gambling, there are individuals who spend beyond this level. Thus, the estimates in the current study will under-estimate actual revenues, as typically gambling revenues are sensitive to the contribution of a small proportion of players who spend at high levels (outliers). However, the capped expenditures allow for meaningful comparisons between segments and will illustrate the relationship between characteristics and expenditures.

average, Nova Scotia adults spent approximately fifteen hours in the past year ( $\bar{x}$  = 14.5 hours; median = 0 hours) playing these games. This translates to approximately 36,200 days (24 hour period) when projected to the population ( $\approx 597,500$  adults<sup>3</sup> X 15 hours). In total, 46% of adults engaged in any of the three types of gaming over the last year and, on average, spent 32 hours collectively playing these games. The majority (80%) spent under 24 hours last year playing, with the remaining 20% of players ( $\approx 10\%$  of the population) accounting for 89% of the time spent on casinos, VLT's and bingo combined.

**Figure 3**



Of the total time spent last year playing the three types of gaming in Nova Scotia VLT's alone accounted for 50% of the time expenditures. Although a similar proportion of adults played bingo as VLT's (17% versus 20%), bingo accounted for 36% of the total time spent. Casino gaming only accounted for 14% of all the time allocated to the three types of gaming, despite the fact

that one-third of all adults visited a casino for gaming purposes over the last year.

It should be kept in mind that bingo typically takes place over a two hour period. Average expenditures also tend to be significantly lower for bingo than for VLT's. On a per adult basis, average monthly expenditure for bingo is only one-quarter of that noted for VLT's ( $\approx \$5.00$  versus  $\$19.00$ ) and does not differ from the average amount of money spent per adult on casino gaming ( $\$5.30$  versus  $\$5.41$ ). Thus, it appears that bingo may offer

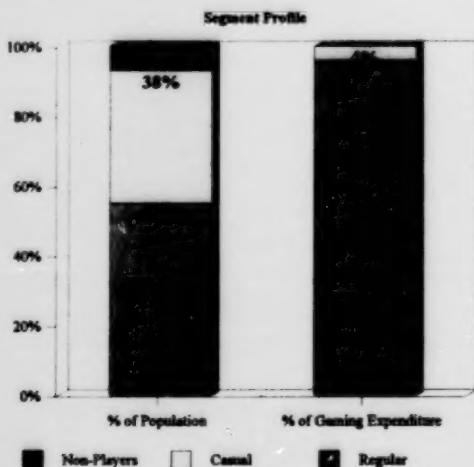
<sup>3</sup>Source: 1998/99 Nova Scotia adult (19 years +) population estimates; FP Markets Canadian Demographics - 1999 Financial Post.

more return to players in terms of the amount of time for money spent playing, whereas VLT's provide the least return in this regard. This relationship can be further explored to examine the impact for the players of each type of gaming.

## Player Segmentation

Based on play in the last year, 55% of all adults in Nova Scotia were involved in regular on-going play for at least one game of chance. There were 38% of adults who are characterized as Casual Players, meaning they played at least one game of chance for money over the past year, but did not engage in any one activity once a month or more. Only 7% of adults in the province were not involved in any gambling or gaming activities for money.

**Figure 4**



On average, Regular Players in Nova Scotia spend approximately \$84.00 per month on gambling versus only \$5.00 for Casual Players. As a result, on an annual basis, the 55% of adults who play games of chance regularly each month are, collectively, contributing 96% of all out-of-pocket gaming expenditures. The remaining 38% of adults who play on only a

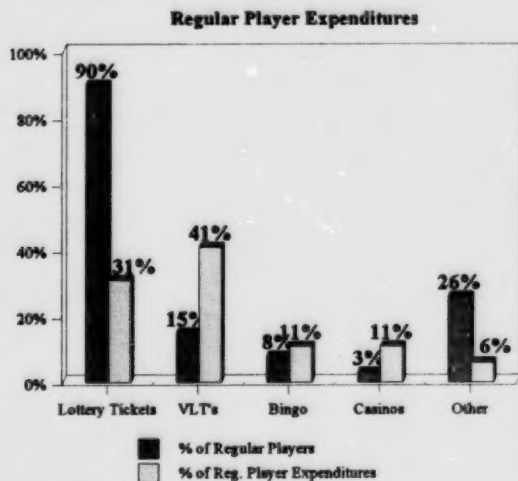
casual or occasional basis are contributing approximately 4% to gaming revenues.

To better understand the relationship between regular gaming patterns and the various types of gaming offered in Nova Scotia, the results were examined only for those adults who engage in any gambling activity on a



regular monthly basis (Regular Gamblers).

**Figure 5**



Not surprisingly, due to low per unit cost, high social acceptability and easy access to on-going play, 90% of all Regular Gamblers in Nova Scotia are playing lottery ticket games each month. However, involvement in regular lottery play only accounts for 31% of total regular gaming expenditures (average expenditure per month, per regular player ≈ \$26.00).

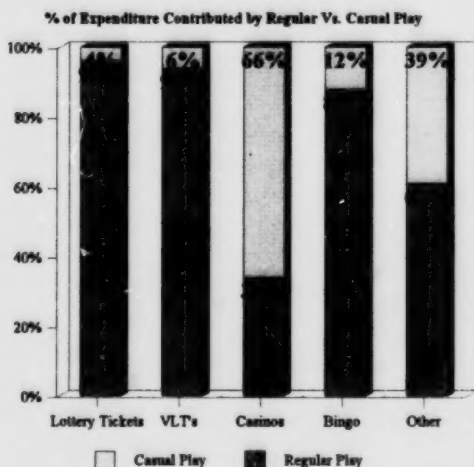
As noted previously, VLT's generate the largest proportion of expenditures by regular gamblers in the province. Although only 15% of these adults engage in VLT play each month, average monthly expenditure per regular player (≈ \$34.00) represents 41% of all regular gaming expenditures.

Interestingly, bingo and casino gaming account for a similar percentage of total regular gaming expenditures, yet almost three times as many Regular Players participate in bingo each month. This illustrates that those who do play casino games on a regular basis are spending at substantially higher levels than is the case for bingo.

There are 26% of the regular gamblers in Nova Scotia who reported they take part in other regulated (i.e., charity raffles, horse racing) and non-regulated (i.e., card games, sports bets/pools, Internet gambling) gaming options on a continuous monthly basis. Currently, half of the expenditures within this group are going to unregulated games of chance. This only represents approximately 3% of the total amounts spent by regular gamblers, with non-regulated games of chance accounting for 3.6% of total

annual gaming expenditures in the region.

Figure 6



In order to assess the impact of specific games of chance on playing patterns, the percentage of revenue contribution generated by Casual versus Regular Players was calculated within each of the main gaming options. Thus, for each game, it is possible to profile the percentage of expenditure coming from those who play the game on a casual, occasional basis, as compared to those who play regularly each month.

Not surprisingly, for those activities which provide players with greater, widespread accessibility (i.e., more even access throughout the province), expenditure contributions are skewed heavily towards regular play. In particular, almost all lottery ticket (96%), VLT (94%) and, to a lesser extent, bingo (88%) expenditures are contributed by those who play these games on a regular basis. Those adults who played any of these types of gaming options on an irregular basis have a marginal impact on revenues. Conversely, two-thirds (66%) of casino expenditures are generated by casual play. As one-third of adults visited a casino for gambling purposes last year, the results suggest the vast majority ( $\approx 94\%$  or 31% of all adults) did so on an infrequent or occasional basis and contributed the bulk of the revenues. However, there is some cause for concern, given that the remaining 6% who attended the casino last year ( $\approx 2\%$  of adults in the region) appear to be contributing the remaining third of casino revenues. Additional research is required to fully explore the issue.

Other games of chance played for money in Nova Scotia appear to derive a greater proportion of revenue from Regular Players (61%), although not to the extent noted for lottery tickets, VLT's and bingo. Charity raffles and draws (33%) and non-regulated card games (38%) account for the majority of regular expenditures.

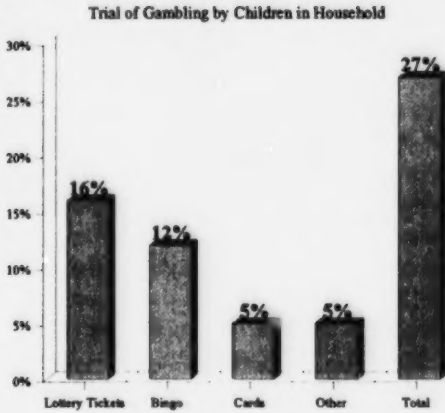
### **Gambling by Children**

In the 1999 survey, all respondents who indicated they had children under 19 years of age, living at home, were also questioned as to whether the child or children had ever taken part in any gambling activities. Based on the results, 11% of adults reported having children in their households that had taken part in some type of gambling activity in the past, primarily lottery ticket play (6%) and bingo (5%), with 2%, respectively, noting card games played for money and other types of gambling.

Reported play levels were twice as high for children, if there were at least one adult in their households who gambles on a regular basis (14% versus 7%). As sampling was undertaken by the random selection of one adult per household, it is possible to project the results to the population at a household level.

Approximately 41% of those sampled report having children living in their households, with an average of 1.8 children per household.

**Figure 7**



Overall, 27% of those who have children in their households indicate that they are aware the child/children have participated, at some time, in a gambling activity. Those who noted they lived with children who had participated in gambling, on average, tended to have 2.0 children in the household. If it is assumed that gambling behaviour is similar for all children in the household

(i.e., if one child has participated in gambling, it is likely that siblings will also have taken part), it is possible to estimate the percentage of children in Nova Scotia who are known to have taken part in gambling activities.

**Based on the reported behaviour of children by adults living in the same households, it can be estimated that approximately 30% of all children under 19 years of age in Nova Scotia are believed to have taken part in gambling at sometime. Regardless, in approximately one-quarter those households in which children reside, the child/children are known to be taking part in regulated gambling (i.e., lottery tickets and bingo).**

### **Regional Differences**

Due to the small sample size in Cape Breton County (n=83), there were no statistically significant differences in general gaming patterns or expenditures.

Gaming expenditures appear to be skewed lower in Cape Breton County (\$35.18/month), as compared to Halifax County (\$65.24/month), although the difference is only significant at the 90% confidence level ( $p < .10$ ).

In all three regions, play of charity raffles and draws (62% to 67%), VLT's (21% to 20%), bingo (15% to 18%), and horse racing (2% to 3%) are all similar over the past year.

Gambling in Halifax County appears to be more diversified than in the other two regions. Adults in Halifax County are significantly more likely to have played card games for money outside a casino (24% versus 11% to 14%), Sport Select Proline (10% versus 2% to 3%), other sports betting (11% versus ROP: 5%), slot machines (37% versus ROP: 23%) and casino table games (14% versus 6% to 7%). Play of \$2.00 Scratch 'n Wins (47% versus 56% to 59%) and breakopen tickets (13% versus 21% to 22%) tends to be lower in Halifax County than in the other two regions.

Lottery ticket games are all more popular in Cape Breton County, with 92% of adults having purchased a lottery ticket in the past year compared to 81% to 84% elsewhere in Nova Scotia. This region has the highest level of participation in draw play (88% versus 74% to 76%), although regular playing patterns do not differ significantly from Halifax County or Rest of Province. Play of the instant tickets is high and, for \$2.00 games, is similar to play levels in the Rest of Province ( $\approx$  59%). However, adults in Cape Breton County are almost twice as likely to be buying \$1.00 Scratch 'n Wins (44% versus 27% to 28%). Interestingly, play of Sport Select Proline, the ALC sports lottery, is lower than in Halifax County (2% versus 10%), yet adults in Cape Breton County were equally likely to have participated in other sports betting ( $\approx$  10%). As expected, slot machines were played by 45% of adults in the last year, similar to results in Halifax.

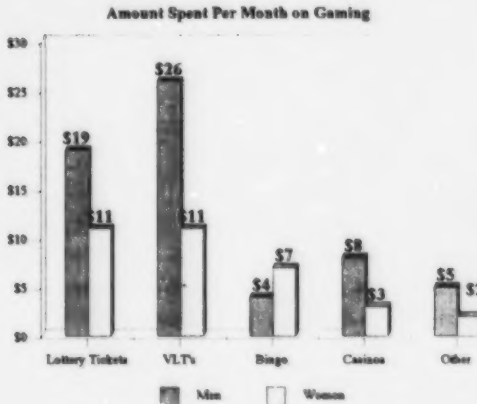
The only notable differences for play behaviours by adults outside of Halifax and Cape Breton Counties are lower rates of play for slot machines (23% versus 38% - 45%) and non-ALC sports bets/pools (10% versus 5%). These results are most likely due to lower accessibility rather than any real difference in preference for the activities.

### **Gender Differences in Gaming**

On average, women in Nova Scotia have played more different types of games in the last year (3.7 versus 3.4), however, men are more inclined to take up regular playing patterns (1.2 versus 0.9).

The majority of men in the province are involved in gambling on a regular monthly basis (61%), whereas women tend to be fairly evenly divided between regular (49%) and casual play (45%). In fact women comprise 61% of all casual gamblers across Nova Scotia.

**Figure 8**



This discrepancy contributes, in part, to the differences in average monthly expenditures observed between the sexes. Men, on average, spend \$62.31 per month, as compared to \$34.22 for women. As a result, **annual gaming expenditures, on average, are almost twice as high for men than women (\$750.00**

**versus \$410.00), with men contributing almost two-thirds (64%) of all gaming expenditures in Nova Scotia.** Differences in expenditure can also be attributed to the types of gaming in which men and women are involved.

Women are more likely than men to have played lottery ticket games in the last year (87% versus 81%), yet significantly more men engage in the activity on a regular monthly basis (57% versus 43%). This regular playing pattern is almost exclusively accounted for by men's response to the draw tickets (51% versus 32%). Conversely, women are significantly more likely than men to have played the instant tickets in the last year (68% versus 46%), yet, again due to the adoption of regular playing patterns by men, regular play is similar for the instant games (26% versus 22%). Men are spending almost twice as much as women on lottery tickets each month ( $\approx$ \$19.00 versus \$11.00), however, the proportion of their total gaming expenditures allotted to lottery ticket play is almost identical (30% versus 32%).

Women are significantly more likely to have played bingo in the last year

(26% versus 6%) and on a regular basis (5% versus 1%). Average expenditures for women are higher, but do not differ significantly from men (\$6.79 versus \$3.79) due to the higher expenditure by those few men who do take part. Regardless, approximately 20% of women's gaming expenditures are dedicated to bingo versus approximately 6% of men's expenditures.

Women are also more inclined than men to respond to charity raffles and draws, but typically expenditures are low.

**The key gaming options played primarily by men consist of VLT's (25% versus 16%), casino table games (12% versus 5%), Sport Select Proline (11% versus 1%) and other sports betting (11% versus 4%). Collectively, these gaming options account for 63% of men's gaming expenditures versus 47% for women.**

For VLT's, men are significantly more likely to engage in regular play and account for the majority (72%) of regular players throughout the province. As a result, expenditures by men are 2.4 times higher (\$26.50 versus \$11.40). This is not necessarily the case for casino gaming, where women comprise half of all those who have visited a casino in the last year. Yet, on average, men's monthly expenditures are significantly higher than women's (\$7.56 versus \$3.32).

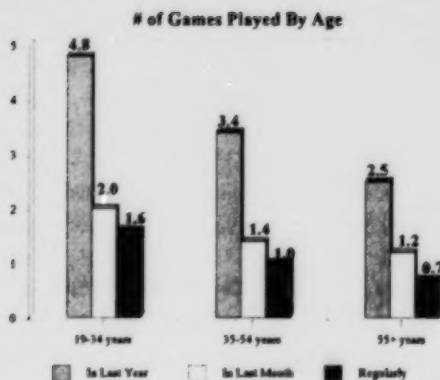
### **Age Differences in Gaming**

Age was obtained for each respondent and then, for the purpose of the current report, grouped into three age categories for meaningful comparison: 19 - 34 years of age, 35 - 54 years of age, 55 years or older.

**Undoubtedly, age is strongly related to gambling behaviours in Nova Scotia such that as age increases, the level and extent of involvement in gaming declines.**

Essentially, younger adults in the province have played almost twice as many games of chance in the last year compared to those over 55 years of age (4.8 versus 2.5).

**Figure 9**



In general, adults under 54 years of age are more likely to report involvement in regular monthly gaming activity (58% - 60% versus 45%). However, general gambling expenditures by adults 19 - 34 years of age are significantly higher (\$85.82/month). The fact that there are no significant differences in expenditures among those over 35 years of age is

noteworthy, given that older adults (55 years +) are less inclined to participate in gambling than those in the middle age range (35-54 years: \$32.42; 55 years +: \$26.58). **It appears that while older adults are less likely to be involved in almost all forms of gaming, when they do take part, expenditures are higher (for at least some types of gaming).**

It has been speculated that lifestyle or, more specifically, "life stages" impacts the amount of disposable time and financial resources available to an individual (1997/98 NS VL Players Survey - Section 2.0 Provincial Overview). Presumably, those adults at either end of the age continuum often have both time and money available, as family and career obligations may be less of an issue, as compared to those in mid-range age category (34-54 years).

For virtually all forms of gaming, with the exception of sports betting which is similar for those under 55 years of age (9% - 11%), younger adults are significantly more likely to have played over the past year.

Older adults are least likely to be regular lottery ticket players (39% versus  $\approx$  54%). However, regular play of draw games is identical for both younger adults and those over 55 years of age ( $\approx$  36%). In fact, regular lottery ticket purchasing by older adults is almost exclusively driven by response towards the draw games. Conversely, adults age 19 to 34 years are much



more responsive to the instant products, with over twice as many playing the \$2.00 Scratch 'n Wins (38% versus 15% - 10%), and breakopens (10% versus 2% - 4%), as compared to adults over 35 years of age. Proline is also a more popular game for young adults, with approximately 5% playing monthly versus 1% for older adults.

Young adults are also significantly more likely to be playing VLT's on a regular basis (19-34 years: 16% versus 34-54 years: 6%; 55 years +: 2%). In fact, 54% of younger adults' gaming expenditures are dedicated to video lottery play versus only 16% to 22% of older adults' expenditures. Over the last year, approximately one-third (33%) of young adults have played VLT's, as compared to 19% for those age 35 to 54 years and 5% for those 55 years and older. Obviously, opportunity to play (i.e., being in locations which offer the machines) appears to be greater for young adults and this tends to translate to higher regular play levels.

It is noteworthy that while young adults (<35 years of age) are over twice as likely to have played bingo last year (28% versus  $\approx 11\%$ ), the percentage involved in regular monthly play of bingo is similar in all age groups. ( $\approx 3\%$ ).

The results are even more strongly skewed for slot machines. Young adults (<35 years) were significantly more likely to have played slot machines at a casino during the past year (43% versus 35-54 years: 30%; 50 years +: 18%), yet virtually none of these adults took up regular playing patterns for the machines. Despite the inverse relationship between age and play of slots over the past year, those over the age of 55 years are significantly more likely than their younger counterparts to report regular monthly play of slot machines at a casino (4% versus 0% - 1%). While findings should be considered exploratory due to small within segment sample sizes ( $n=29$ ), it appears that of those older adults (55 years +) who played slot machines last year, approximately one-quarter were involved in regular on-going play of the machines.

### **Income Differences in Gaming**

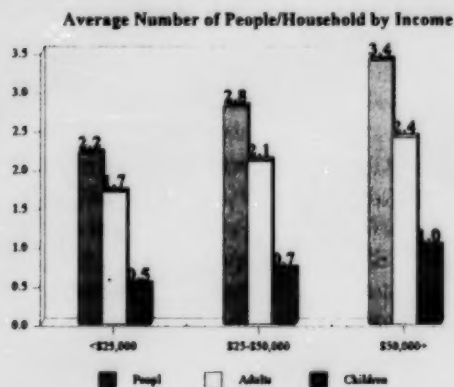
All respondents were asked which of five broad income categories best described their total 1998 annual household income before taxes. In order to obtain data for meaningful comparisons, annual household incomes were

segmented into three primary income categories, as well as a fourth designation for “refusals/don’t knows:

- less than \$25,000 per year;
- \$25,000 to \$50,000 per year;
- more than \$50,000 per year.

As annual household income increases the average number of people contributing to this income also increases. Based on survey results, on average, 1.8 adults are contributing to the income of each household. However, for those with household incomes under \$25,000 per year, there are significantly fewer adults, on average, contributing to the household finances (1.5 adults) than for either those with mid-range incomes (1.8 adults) or the highest income levels (2.0 adults).

**Figure 10**



This finding is largely attributable to household size. In general, those households with the highest incomes, on average, tend to have significantly more adults (2.4) and children (1.0) in residence, and this declines as household incomes go down.

It should be noted that, comparatively, women comprise a larger

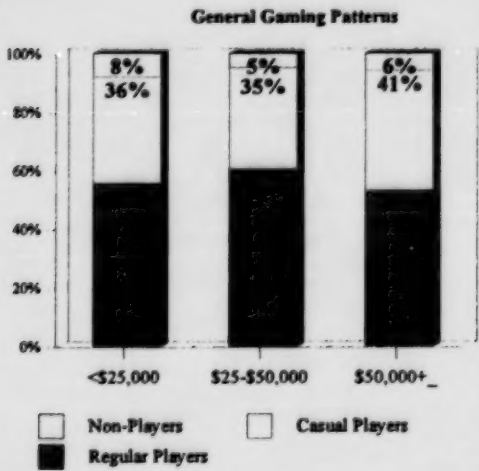
proportion of those with annual household incomes under \$25,000 (59%). In fact, for those who reported an annual household income (excluding refused/don’t knows), 40% of women indicated amounts under \$25,000/year versus only 26% of men. As a result, differences in response among the income segments will also reflect this gender bias.

**In terms of the general relationship between gaming behaviours and income, there are few strong differences. This finding, in and of itself,**

is significant, as it could be argued that those with higher incomes should have more disposable income to allocate to gaming pursuits. There are no significant differences in average gaming expenditures among the three primary income segments. This means that those living in lower income households are spending a higher proportion of their incomes on gaming in the province.

Adults with household incomes over \$50,000/year tended to engage in 3.9 different gaming activities last year, as compared to 3.4 for those with incomes under \$25,000 ( $p < .10$ , 90% confidence level). However, regardless of income, all adults played approximately 1.1 games of chance on a regular basis.

**Figure 11**



There are no significant differences for general involvement in gaming among the three income segments. However, there are some notable variations in the types of gaming activities engaged in by adults in each category.

Over the last year, those with higher annual household incomes were more inclined than all other adults to have been involved in casino

gaming (48% versus 21% to 32%), especially slot machine play (46% versus 19% to 29%) and non-ALC sports betting (16% versus 1% to 7%). Adults in this income segment were just as likely to be involved in regular monthly play of lottery draw tickets (40% - 45%), but only half as likely to buy the \$2.00 instant tickets, as compared to those with incomes under \$50,000 (12% versus 24% to 27%). The highest income group was also most responsive to regular purchasing for non-ALC raffles and draws (16% versus ≈ 7%).

Conversely, those with incomes under \$25,000 tended to be more inclined to play bingo (23% versus 9% to 15%) and the ALC 50¢ breakopen tickets (26% versus 19% to 13%), and less likely to play Sport Select Proline (1% versus 7% to 10%) and casino games (21%), especially table games at a casino (4% versus 10% to 13%).

There were no differences noted for play of ALC draw tickets ( $\approx 41\%$ ), \$1.00 Scratch 'n Wins ( $\approx 7\%$ ) and VLT's (7% - 9%).

### **Summary: Provincial Overview**

**Involvement in gambling and games of chance played for money is a widespread activity in Nova Scotia, with 93% of adults in the province having played at least one gaming option over the last year. On average, adults spent approximately \$50.00 per month on gaming. However, expenditures are skewed heavily towards those who play games on a regular basis of once a month or more ( $\approx$ \$85.00/month), as compared to those who play on a casual or occasional basis ( $\approx$ \$5.00/month). Just over half of all adults in the region engage in at least one gambling activity on a regular on-going basis each month and, collectively, contribute approximately 96% of the total revenue derived from gaming in the province.**

**Although the majority (90%) of regular playing patterns are primarily driven by response towards ALC lottery tickets, especially the draw games, this type of gaming only accounts for approximately 30% of total gaming expenditures. Comparatively, video lottery, alone, comprises approximately 40% of gaming expenditures, despite the fact that only 8% of adults engage in VLT play each month versus 50% who play lottery tickets regularly.**

**Of the three types of games for which time measures were obtained (VLT's, bingo and casino gaming), VLT's also account for the largest percentage of time expenditures by players (50%). It should be noted that, of the three options, bingo appears to offer the greatest return to players in terms of the amount of time for money spent.**

Not surprisingly, for those games which offer better access to on-going play, expenditure contributions are more heavily skewed towards the regular players. For lottery tickets, VLT's and bingo, the majority (88%+) of revenues are contributed by those who play on a regular monthly basis. Only for casino gaming are the casual players accounting for the bulk (66%) of expenditures. Obviously, the availability of casino gaming at only two restricted locations in Nova Scotia is influencing this result. However, it appears that a very small percentage of adults ( $\approx 2\%$ ) who are engaging in regular monthly casino play are contributing a disproportionate amount of the revenues (approximately one-third). While additional research specifically targeting casino players is required to fully explore this relationship, the results suggest response to slot machines is driving the majority of regular play at casinos. Furthermore, this may be more of a concern for older adults in the region. While those over 55 years of age are least likely to have played slot machines in the last year (18% versus 36%), they are significantly more likely to take up regular playing patterns (4% versus  $\approx 1\%$ ), with approximately one-quarter of those who try the games continuing to play each month.

Currently in Nova Scotia, involvement in gambling activities is related most strongly to gender and age.

Men in the province are more likely to be involved in regular playing patterns for a wider diversity of gaming options. Average gaming expenditures per month are twice as high for men than women ( $\approx \$62.00$  versus  $\approx \$34.00$ ), with men contributing two-thirds of total gaming revenue. Women tend to be more responsive to bingo, \$2.00 Scratch 'n wins and charity raffles and draws, whereas men have higher involvement levels with VLT's, sports betting and casino gaming.

In general, younger adults (19 - 34 years) in the province are significantly more likely to have been involved in almost all gaming activities available in Nova Scotia. While they are just as likely to engage in regular gaming as those 34 to 54 years of age, on average, they spend almost  $2\frac{1}{2}$  times more each month on gambling activities

(≈\$86.00 versus ≈\$32.00). This is largely due to the types of games they are involved in, with almost half of their monthly expenditure exclusively allocated to video lottery play. Younger adults are also more responsive to the instant lottery tickets, especially \$2.00 Scratch 'n Wins, breakopens, as well as Proline. Despite the tendency for adults under 35 years of age to generally be more heavily involved in gaming in Nova Scotia, it appears that, unlike their older counterparts, for bingo and slot machines, this greater exposure does not translate to higher regular playing patterns.

Interestingly, income is not related strongly to gaming expenditures, thus, those with lower annual household incomes are likely devoting a greater proportion of their disposable income to gaming pursuits. The results suggest that those with the highest incomes are more likely to be involved with casino gaming, sports betting and non-ALC charity raffles and draws. Conversely, bingo and breakopens appear to have greater appeal for those with the lowest annual incomes. Response to draw games, \$1.00 instant tickets and VLT's did not differ among the income segments.

Involvement in gaming by adults in Nova Scotia is high, suggesting that there is a fair amount of social acceptance and legitimacy associated with gaming. This is reflected in the proportion of children who are known by adults to have taken part in games of chance played for money. It can be estimated that approximately 30% of children in Nova Scotia have tried some form of gambling. Lottery tickets and bingo, collectively, account for the majority of this involvement (24% of all children), although trial of card games and other forms of gambling have been reported for approximately 5% of children in the province.

## **PARTICIPATION IN GAMING ACTIVITIES**

All respondents were asked about their participation in 18 different games of chance for which money prizes are available (including both regulated and non-regulated gaming activities). Participation was estimated in terms

of whether the respondent had ever played (trial), played in the past year, play in the past month and regular (on-going) monthly play. In addition to prevalence of play, information on frequency of play, average expenditures and average amount of time spent playing each game (when applicable) were obtained.

To provide further insight into game profile information, **continued adoption** rates were calculated. For this report, continued adoption is defined as the proportion of those who have ever tried a gaming activity who subsequently adopted regular play of the game (i.e., once per month or more on an on-going basis). This measure illustrates the propensity of adults to continue (regularly) playing a game of chance once they have tried it. It also allows for comparisons among the various games which are independent of the percentage of adults who actually engage in the activity. This is valuable when trying to assess the impact of any changes in marketing or in distribution strategies (i.e., methods of enhancing adults' access to or trial of a particular game).

The following sections discuss play levels and patterns by adults in Nova Scotia, for each of the four primary types of regulated gaming activities:

- Lottery Tickets
- Casino Gaming
- Bingo
- VLT's

### **Participation In Lottery Ticket Play**

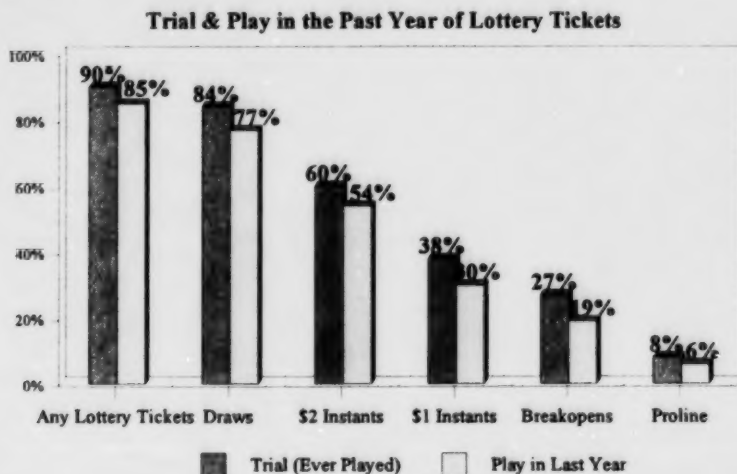
Lottery tickets are comprised of ticket games offered in Nova Scotia by the Atlantic Lottery Corporation. This includes Draw games (e.g., Lotto 6/49, Lotto Super 7, Atlantic Choice), \$2.00 Instant (e.g., Lotto Bingo, Crossword), \$1.00 Instant, 50¢ Breakopen/Pull-Tabs, and Sport Select Proline (on-line sports betting).

ALC's lottery ticket games are the most popular form of gaming among Nova Scotian adults. Significantly more adults have played ALC tickets at some point in their lifetime, in the past year, past month and on a regular monthly basis than any other gaming option available in the province. What's more, of those adults in the province who have ever tried lottery



ticket games, a significantly greater proportion adopt regular playing patterns than for any other gaming option.

**Figure 12**



**NOTE:** Compared to 1998 results, lottery play in the last year increased significantly from 70% of adults to 85%. However, it must be kept in mind that changes in question administration may be responsible for higher play levels. In 1998, all lottery tickets were grouped together; in 1999, measures were gathered for each individual category of lottery games. Individual measures will tend to improve the accuracy of respondents' recall. Due to changes in the questionnaire, the remaining measures of lottery ticket participation are not directly comparable last year's results.

Almost all adults in the province have tried at least one type of lottery ticket game at some time in the past (90%), and the considerable majority have played in the past year (85%). Draw games are primarily responsible for these high levels, with 84% of adults having ever played a Draw ticket and more than three-quarters buying a ticket in the past year. Draw games have very broad appeal, particularly for adults in Cape Breton county (94% trial) versus the rest of the province ( $\approx$ 45% trial). A full quarter (25%) of



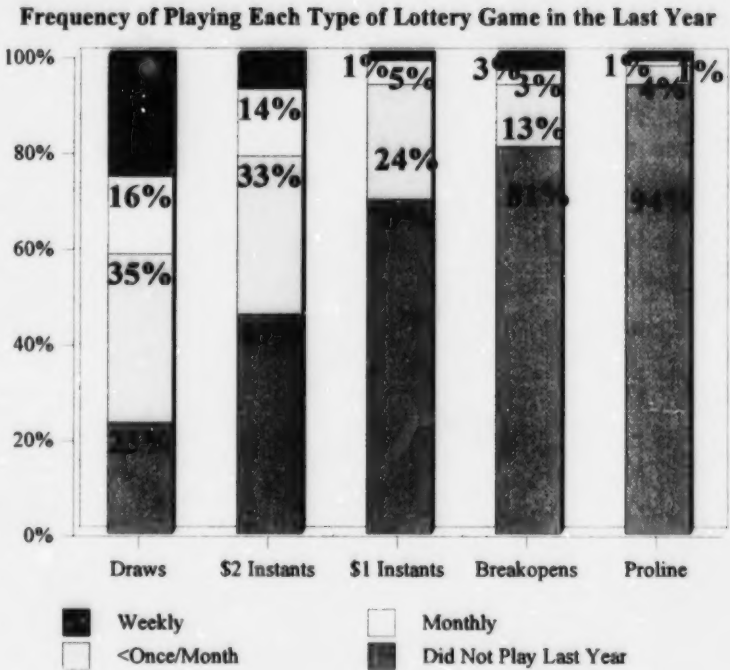
Nova Scotian adults report that Draw games are the only type of lottery ticket they have ever played. Draws are also the only type of lottery ticket for which men and women are equally likely to play.

Approximately 60% of adults have tried ALC's \$2.00 Scratch 'n Win games, with over half having played at least one ticket last year. These tickets hold particular appeal for women; more than two-thirds of women in the province (69%) have ever played a \$2.00 Instant ticket, and women account for 61% of those who bought a \$2.00 Scratch game in the past year. Younger adults (under 35 years) and people in households with income levels below \$50,000 are also more inclined to have tried these tickets.

Trial and play levels are somewhat lower for \$1.00 Instants and 50¢ Breakopens, although most trial players for each type of lottery game did play during the last twelve months. As noted for \$2.00 Instants, play is at higher levels for adults under 35 years of age than their older counterparts. This suggests that the "Instant" aspect of these games (i.e., knowing quickly whether or not each ticket is a "winner" as opposed to waiting for a draw) is more appealing to younger people. It may also be that the prize structure is also influencing the age bias. Typically, the instant games of more frequent wins is also playing a role.

Sport Select Proline shows the most limited appeal with trial and play at less than 10% of adults. This is not surprising, given the sports-specific nature of the game, whereas other lottery ticket games are designed to have comparatively broad appeal. The on-line sports lottery was more likely to attract adults from higher income households, with those in homes with annual incomes exceeding \$25,000 significantly more likely to have tried the game ( $\approx 12\%$  versus  $2\%$  up to \$25,000). Younger adults (under 35) are also more than twice as likely to have ever played Proline ( $16\%$ ) than those aged 35 to 44 ( $7\%$ ) or over 54 ( $1\%$ ). As may be expected, men are much more inclined to have tried the sports lottery ( $15\%$  versus  $2\%$  of women).

Figure 13



In terms of frequency of play, Draw games are the most often purchased lottery tickets. More than one-third of adults in Nova Scotia play lottery Draw games on at least one occasion per year, with a further 41% playing on a regular monthly basis. In fact, one-quarter of all adults in the province buy at least one Draw game every week.

Regular Draw players (once per month or more) account for nearly half (48%) of all adults who have ever played any lottery games, and 83% of those who play any lottery games on a regular monthly basis. Thus, levels for overall lottery ticket play are driven primarily by Draw games and, as a result, the profile of Draw players closely resembles the profile of lottery players overall.

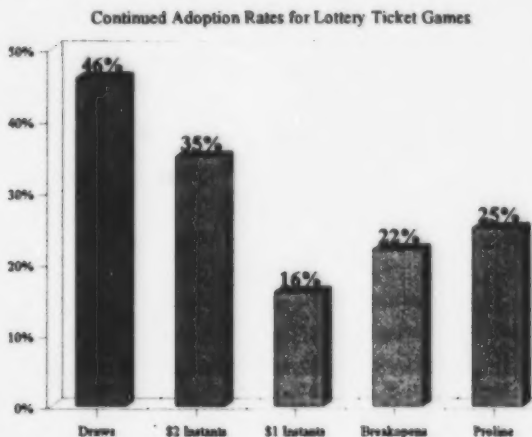
One-third of adults play \$2.00 Instant games less often than once per month, and 21% play on a regular monthly basis. Of these monthly players, a third buy \$2.00 Scratch tickets at least once per week (7% of all adults in the province). While regular play of the \$2.00 Instant is only half that of Draws, this type of lottery ticket game is played by at least three times as many adults as noted for the remaining types of lottery games. There is a significant relationship between regular play of \$2.00 Instant and Draw tickets ( $r = .26$ ), with 14% of all adults playing both types of lottery games regularly. In fact, two-thirds (66%) of regular \$2.00 Scratch players also buy Draw tickets on a monthly basis.

As noted for trial and play in the last year, regular \$2.00 Instant players are more likely to be found in households with income levels less than \$50,000 per year (25% versus 12% for \$50K or more). As well, younger adults (under 35) are more inclined to play these tickets regularly than their older counterparts (38% versus 10% to 15%). Interestingly, while women are much more likely to have tried \$2.00 Instant and to have played in the last year, men are just as likely to currently buy \$2.00 Scratch 'n Win games on a regular monthly basis. This suggests that women are more inclined to buy these tickets on impulse.

Play of \$1.00 Instant and Breakopen games are much less prevalent across Nova Scotia than \$2.00 Instant or Draw games. Nearly one-quarter of adults in the province (24%) buy \$1.00 Instant at least once per year, and only 6% play these ticket games on a regular monthly basis. A similar proportion of adults are regular players of 50¢ Breakopen tickets (6%), but fewer adults play on an occasional basis (13%). As noted for trial and play in the past year, regular play for each of these instant games is higher for younger adults. \$1.00 Instant, however, elicit higher levels of regular play patterns in Cape Breton county (16%) than in Halifax county (4%) or the rest of the province (6%).

Given the low levels of trial for Sport Select Proline (8%), it is not surprising that only 2% of adults in the province play this game on a regular, monthly basis. Virtually all others who play the sports lottery on a yearly basis indicate that they purchase on a seasonal basis (e.g., during hockey/football season) (3%).

**Figure 14**



Not surprisingly, Draw games have the highest continued adoption rate with almost half (46%) of all those who have tried the game taking up regular playing patterns. This is the highest continued adoption rate noted for all games of chance

measured. The nature of Draw games contributes greatly to the high level of regular play adoption, including extremely high potential return-on-investment (i.e., high jackpots for a low ticket cost), easy/widespread access and social acceptability of this form of gambling. Factors such as the ability to select one's own numbers further commit players to regular purchasing in efforts to not "miss their numbers coming up."

\$2.00 Instants comprise the gaming category with the second highest rate of continued adoption of all, with more than one-third of trial players adopting regular play habits. While this type of ticket is not tied to a schedule (as are Draws), they do have a relatively high potential return (i.e., \$10,000 or \$20,000 top prizes for the \$2.00 cost). The top prizes, combined with enjoyment of the various themes (e.g., Lotto Bingo, Crossword), the perceived play value (i.e., "extended play" line of ticket games which are designed to take longer to play) and limited series of individual games (i.e., periodic new "pulses" or series with 'new' top prizes available) all contribute to the adoption of regular play for those who try these games.

Sport Select Proline ranks fourth in terms of continued adoption for all games of chance played for money (exceeded by VLT's, \$2.00 Instants and

Draws). This lottery ticket game is, by comparison, very specialized and has attracted a small and distinct group to regular monthly play. As might be expected, more people play this game on a seasonal basis than monthly; it is likely that during the various sports seasons, regular play will be adopted by some for the duration of the season (i.e., while favourite sports games are available for wagering).

The 50¢ Breakopen/Pull-Tab games rank fifth overall for continued adoption, with 21% of those who have tried these tickets continuing with regular play. The player base for this type of lottery game is smaller than for other ticket games (excluding Proline), suggesting a somewhat limited appeal. These games offer comparatively low top prizes (\$500 or \$1,000) and are played very quickly. The fact that winning tickets must be redeemed at the location of purchase may inhibit regular play, particularly for those who do not consistently visit the same retail location.

\$1.00 Instant tickets have the lowest continued adoption rate of lottery ticket games (17%), although this rate does exceed gaming activities such as bingo in bingo halls (9% continued adoption) and casino gambling (0% to 2%). Given that regular play and trial are at higher levels for the \$1.00 games than either Breakopens or Proline, this suggests that play of the \$1.00 Scratch 'n Win tickets is more impulsive for players rather than a regular lottery purchase.

**Table 2**  
**Average Monthly Expenditures† on Lottery Tickets - Per Adult,  
 per Regular Player & Per Regular Game Player**

	Per Regular Game Player	Per Regular Lottery Player	Per Adult	% of Monthly Lottery Expenditures
Total Lottery Games	N/A	\$28.68	\$14.83	100%
Draw Games	\$18.55	\$15.58	\$8.03	54%
\$2.00 Instant Games	\$16.78	\$7.49	\$3.91	26%
\$1.00 Instant Games	\$8.32	\$1.22	\$0.66	4%
50¢ Breakopens	\$18.64	\$2.39	\$1.22	8%
Sport Select Proline	****	\$1.99	\$1.02	7%

\*\*\*\*Sample size for regular Sport Select Proline players is too small to profile (n=6).

†NOTE: Due to small sample sizes, average expenditures were capped in order to reduce the influence of outliers on means.

On average, adults in Nova Scotia spend \$14.83 per month on lottery gaming. More than half of this expenditure is spent on Draw games, with just over one-quarter spent on \$2.00 Scratch 'n Win tickets. Those who play \$2.00 Instant games on a regular monthly basis spend almost as much on these tickets in a given month (\$16.78) as regular Draw players spend on Draw games (\$18.55).

Interestingly, adults spend, on average, twice as much in a given month on 50¢ Breakopens as compared to \$1.00 Instants. This means that overall, adults buy four times as many of the 50¢ tickets in a month. This is indicative of the more impulsive nature of \$1.00 Instant play, considering the wide variety of \$1.00 Scratch 'n Wins available and the frequent turnover of specific ticket games at retail locations (i.e., favourite themes or games may not consistently be available). Even those who report regular monthly \$1.00 Instant play spend less than half as much on the

\$1.00 games (\$8.32 per regular \$1.00 player) as do regular players of each other lottery ticket category. Regular Breakopen players, conversely, appear to be very committed to play of the Pull-Tab tickets, spending just as much on the 50¢ games in a given month as regular Draw players spend on ALC's Draw games.

Sport Select Proline accounts for approximately 7% of monthly lottery expenditures. Given the small player base for the sports lottery, this suggests that those who do play the game tend to spend relatively large amounts on a monthly basis.

There are no differences in monthly expenditures per adult for any type of lottery game by region or by household income category. However, men spend significantly more than women on lottery games (\$18.80 versus \$10.96), primarily due to Draw games (\$10.00 versus \$6.11). Men also tend to spend more on Breakopens (\$1.89 versus \$0.56) and Sport Select Proline (\$2.06 versus \$0). Younger adults (under 35 years) tend to spend more on a monthly basis playing lottery games than older adults (\$20.41 versus \$9.66 for adults over 54), however, this is mainly due to Instant games and Sport Select Proline. These youngest adults actually spend less, on average, playing Draw games than those between 35 and 54 years of age (\$6.38 versus \$10.22).

When considering only regular lottery players (adults who play any type of lottery game on a regular monthly basis), men spend more on lotteries overall than women, and players under 35 years of age spend more than those aged 35+. For regular players of individual games, however, there are few demographic differences in expenditure levels. Regular Draw players all spend similar amounts per month playing Draw games, and those playing \$1.00 Instant games monthly spend at the same level on the \$1.00 games. Although women are much more inclined to play \$2.00 games, those men who adopt regular playing patterns spend significantly more in a given month on the tickets (\$21.12 per regular male player versus \$13.35).

**Lottery ticket games are the most prevalent form of gaming in the province, with almost every adult (90%) having tried at least one lottery game in their lifetime (primarily Draw games, such as Lotto**

6/49 and Lotto Super 7). Individual categories of lottery games represent four out of the top five gambling options in terms of continued adoption (those who try the games and then continue to play on a regular monthly basis). These regular players contribute 96% of monthly lottery revenues (4% comes from casual or occasional play). Lotteries overall account for nearly one-third (31%) of Nova Scotian adults' monthly gambling expenditures.

More than three-quarters of Nova Scotian adults bought a Draw ticket in the past year, and this type of ticket game has the highest rate of continued adoption compared to all other forms of gambling available in the province (46% of all those who have tried Draw tickets adopted regular play patterns). Factors such as high potential "return-on-investment" (i.e., a chance to win millions of dollars on a \$1.00 ticket), the ability to select one's own numbers, the regular schedule of draws and social acceptability likely contribute to the high levels of on-going play for these games. Draws games account for the majority of monthly lottery expenditures (54%).

\$2.00 Scratch 'n Win games are also popular in Nova Scotia, particularly with women. These ticket games have the second highest rate of continued adoption (out of all gambling activities), and account for more than one-quarter of monthly lottery expenditures (26%). Women are more likely to have ever played \$2.00 ticket games, and account for the majority of those who played in the last year. However, men are just as likely to be regular \$2.00 Instant players and then spend more on the games each month, on average, than their female counterparts.

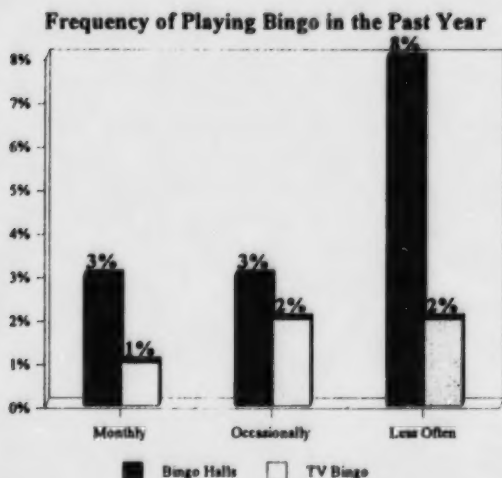
Play of \$1.00 Instant games appears to be more impulsive in nature than the other lottery ticket games, having the lower levels of play and average expenditure compared to Draws and other instant lottery games. Play of 50¢ Breakopens is also comparatively low, although those who buy these tickets on a monthly basis spend just as much per month on the tickets as regular Draw players spend playing Draw games. Sport Select Proline appeals to a small and distinct group of players,



primarily men. Those who do play the sports lottery appear to spend relatively high amounts of money; this game accounts for 7% of average monthly expenditures on lottery games even though only 2% of Nova Scotians play on a regular monthly basis.

## Bingo

Figure 15



Bingo is comprised of commercial and charitable bingo played in bingo halls and through television. Fewer adults have ever tried bingo than slot machines at a casino, despite the fact that Bingo has been around for a considerably longer period of time. Moreover, only 12% of those who have ever tried bingo have adopted regular playing patterns.

Subsequently the proportion of adults who play on a given month or who play regularly each month is low.

Overall, 38% of Nova Scotia adults have tried some form of bingo in their lifetime. Generally speaking, play of bingo is related to gender, income and age. Females, those with the lowest household incomes (\$25,000 or less) and those younger than 35 are significantly more likely than their counterparts to play bingo.

The proportion of Nova Scotia adults who have played bingo in the past year has remained stable since tracking began in 1996, ranging from 16% to 21%. The proportion playing in 1999, 17%, is the same as for 1998. Women are almost 5 times more likely to have played bingo in the past year than men (24% vs. 5%) and those with the lowest household incomes

(<\$25,001) are more likely to have played (23%) than those with higher household incomes (%\$25-\$50,000: 15%; >\$50,000: 9%). Interestingly, younger adults (<35) are more likely to have played (28%) than older adults ( $\approx$  11%). In fact, adults under 35 years of age comprise just over half of those who played bingo last year (55%). Thus, despite the popular misconception that bingo is largely played by older adults, in terms of play over the last year, the opposite is true in Nova Scotia.

Of those playing bingo in the past year, 68% played exclusively at bingo halls, while 17% played TV bingo only and 14% played both forms. Currently there is little overlap between the two games suggesting that both forms of bingo are attracting a distinctive group of players.

Six percent of Nova Scotia adults played bingo in the month before the survey and 4% play on a regular monthly basis. Women in the province are three times more likely to play bingo on a regular monthly basis than men (7% vs. 2%). There are not other notable demographic differences in regular play. Thus, it appears that while younger adults are more likely to have played over the last year, they are less inclined to take up regular playing patterns. As a result, regular play of bingo is similar in all age categories.

Bingo makes up 11% of reported annual out-of-pocket gaming expenditures. Bingo players, on average, spend \$32 a month playing bingo. Average monthly expenditures range from \$8.98 among casual bingo players to \$106 per month among regular monthly bingo players. In the current study, due to small sample sizes for within segment analysis, monthly spending on bingo is not related to gender, region, income or age.

Bingo players spend about 2.5 hours, on average, playing bingo each month ( $\bar{x}$  = 156 minutes; median = 20 minutes). Casual bingo players typically spend about half an hour ( $\bar{x}$  = 37 minutes; median = 20 minutes), whereas regular bingo players play bingo for 8.5 hours each month ( $\bar{x}$  = 510 minutes; median = 227 minutes).

### **Bingo in Bingo Halls**

Bingo played in bingo halls, the traditional form of bingo, has attracted just over one-third (36%) of Nova Scotia adults at some time, however, a much lower proportion tend to play annually or more often. In fact, of those who have ever played, only 9% adopt regular playing patterns. For this reason, very few Nova Scotia adults can be characterized as regular monthly bingo hall players.

Overall, just over one-third (36%) of adults in the province have tried bingo in a bingo hall at some time and 14% have played in the past year. Of those who have played any bingo in the past year, 83% have done so in a bingo hall. Trial and play in the past year are associated with gender, income and age and the patterns are similar to those for trial of any type of bingo.

Among bingo hall players, more than half describe their level of involvement as rare (55%). Only 25% play monthly or more often. Frequency of play is not related to any demographic characteristics.

Very few adults in the province played bingo in a bingo hall in the past month (5%) and even fewer (3%) play on a regular monthly basis. Females are four times more likely than males to have played in the past month (8% vs. 2%) or on a regular monthly basis (5% vs 1%). This suggests that the social nature of bingo play (i.e., "getting out for a few hours") may be particularly appealing to women and supports their on-going involvement in the activity.

### **TV Bingo**

In relation to its traditional counterpart, TV bingo is a new game in Nova Scotia. Given that this is the first provincial survey to estimate the proportion of adults who participate in this form of bingo, the extent to which it has grown in popularity is unknown. However, it appears that it has the potential to become more popular than its traditional counterpart. Although results should be considered exploratory, it appears that, in comparison with bingo played in bingo halls, twice as many of those who try TV bingo take up regular monthly play (9% vs. 20% respectively). Therefore, as more and more people try TV bingo, which is probable due

to fairly unrestricted access (a TV and cable being the only impediments), there is a very good chance that it could become a more popular version of the game and, thus, should continue to be monitored.

In total, 7% of Nova Scotia adults have tried TV bingo at some time and 5% have played in the past year. Both measures of play are related to gender, income and age in the same manner as bingo in general. Of those who played any bingo in the past year, one-third (32%) played TV bingo.

Three-quarters of TV bingo players describe their frequency of play as occasional, rare or seasonal (76%), while just 24% play monthly or more often. No segmentation analysis was done on frequency of play due to small sample sizes.

Overall, just 2% of Nova Scotia adults played TV bingo in the past month and even fewer are regular monthly players (1%).

**Despite its longer standing among the gaming options available to Nova Scotia adults, fewer adults in the province have tried bingo than slot machines at a casino. The proportion of Nova Scotia adults who have played bingo in the past year, in 1999 (17%), remains unchanged from the 1996 to 1998 estimates. In general, play of bingo is related to gender, income and age. Females, those with lower household incomes (<\$25,000) and younger adults (<35 years) are most likely to have engaged in this form of gaming.**

**Most adults play bingo in a bingo hall exclusively, while 17% only play TV bingo and 14% play both varieties. The small degree of overlap that currently exists suggests that both forms of bingo are attracting distinctive groups of players.**

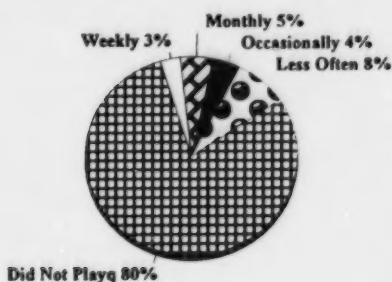
**One-third of Nova Scotia adults played bingo in a bingo hall in the past year, while 5% played TV bingo. Most players, for either form, describe their frequency of involvement as rare or occasional. Therefore, very few adults in the province play bingo in a given month or on a regular monthly basis.**

**On a monthly basis, bingo players spend, on average, roughly 2.5 hours playing bingo and about \$32.00 out-of-pocket. Casual players typically play for half an hour each month, spending just \$9.00 overall, while regular bingo players play for 8.5 hours each month, spending \$106.00 overall.**

## Video Lottery

**Figure 16**

Frequency of Playing VLT's in the Past Year



In the current survey, fewer adults in Nova Scotia have ever tried VLT's (30%) or played them in the past year (20%) than slot machines at one of the two casinos in the province (47%). Nevertheless, play in the past month (9%) and regular monthly play (8%) is greater for VLT's than for slot machines (8% & 2%). To a large extent this reflects wider availability for VLT's. VLT's appear to be very appealing to those who

play them. In fact, 28% of those who try VLT's take up regular playing patterns - the third highest ratio for all games of chance.

The proportion of adults who reported playing VLT's in the past year in 1999 (20%) is similar to what has been reported in earlier surveys. In general, play of VLT's is related to gender and age. Men are significantly more likely than women to have ever tried VLT's (33% vs. 26%), played in the past year (25% vs. 16%), in the past month (13% vs. 5%), and to be regular monthly players (12% vs. 5%). The likelihood of playing VLT's decreases with age. Younger adults (<35 years) are most likely to have tried VLT's (50%), to have played in the past year (35%), in the past month (15%) and to be regular monthly players (15%) and this tendency decreases with age.

Given the above findings, it should come as no surprise that men and those younger than 35 years of age comprise the majority of VLT players in the

past year (60% & 55% respectively). Among the VLT players, the majority (60%) have played less often than once a month in the past year, while 26% play monthly and 14% weekly. In comparison with 1998, there are fewer weekly players in 1999 (26% vs. 14%), however, less frequent play remains unchanged. Frequency of play was not found to be related to any of the demographic characteristics.

Video lottery makes up the largest proportion of reported out-of-pocket expenditure (39%). On average, adults who played any video lottery games last year spent \$93.00 per month playing VLT's. Average monthly expenditure among casual VLT players is \$9.87, increasing to \$217.00, or 94% of all VLT expenditures, when regular VLT players are considered. Among all VLT players, average monthly VLT expenditure was not found to be related to any of the demographic characteristics, again, primarily due to small sample sizes for within segment analysis.

Video lottery players, on average, devote three hours per month to VLT's. Among casual video lottery players, the average is roughly five minutes, whereas regular VL players typically play for more than seven hours.

**VLT's greater accessibility in Nova Scotia make this form of gaming more popular than slot machines on a monthly basis, even though fewer adults have tried VLT's or played them in the past year. Moreover, more than one-quarter of those who have tried VLT's (28%), end up playing them regularly each month—the third highest ratio for all gaming options.**

**The proportion of adults in the province who played VLT's in the past year, in 1999 (20%), remains unchanged from earlier findings. Men and younger adults (<35 years of age) are most likely to play VLT's and to play them regularly.**

**Similar to 1998, most VLT players play less often than once per month (60%). However, 26% play monthly and another 14% play weekly. In comparison with 1998, there are fewer weekly players in 1999.**

**On a monthly basis, VLT players spend three hours each month playing VLT's, spending \$93.00 out-of-pocket. Casual VLT players tend to play for only five minutes each month, spending about \$10.00, whereas regular players typically play for more than seven hours each month, spending \$217.00 out-of-pocket.**

### **Attendance at a Casino in the Past Year**

In terms of play in the past year, casino games are the third most popular form of gaming in the province, following ALC's lottery draw tickets and \$2 Scratch 'n 'Win ticket games. However, because these games are restricted to the two casino locations in the province (Halifax and Sydney), play in the past month and regular monthly play tends to be substantially lower.

Attendance at either the Halifax casino or Sydney casino has remained stable since monitoring began in 1996, ranging from 40% to 38%. In 1999, however, there are fewer adults in the province have been to either of the two provincial casinos (33%). Overall, 23% of adults played exclusively at the Halifax casino, 7% played exclusively at the casino in Sydney, 3% played at both locations, and 67% did not play at either casino. In comparison with 1998, there are fewer people playing exclusively at the Sydney casino (12% in 1998) and at both casinos (6% in 1998). Attendance at the Halifax casino has remained stable.

In general, play of casino games is related to region, income and age. As would be expected, residents of Halifax county or Cape Breton county are more likely to have played casino games in the past year (42% & 46% respectively) than those living in other regions of the province (25%). The proportion who have played casino games in the past year increases with income and decreases with age.

Less than one in ten adults played any casino games in the past month (9%) and very few (2%) are regular monthly players. Play in the past month is related to region and income in the same manner described above.

Similar to bingo, casino gaming accounts for 11% of reported annual gaming expenditures. On average, adults in Nova Scotia spend almost \$65

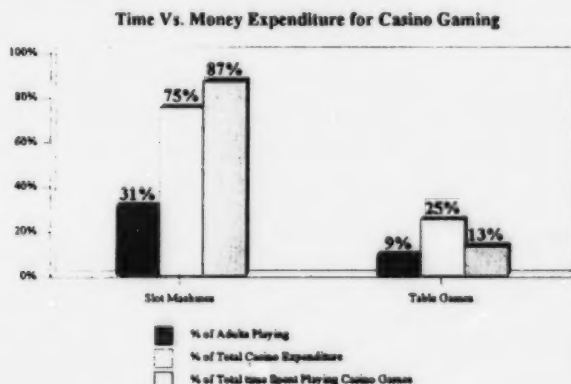
each year on casino gaming ( $\bar{x}$  = \$64.93; median = \$0). Among those who have played casino games in the past year, the average annual expenditure increases to almost \$200 ( $\bar{x}$  = \$198.66; median = \$40.00). Average annual casino expenditures are associated with gender, insofar as men spend twice as much as women playing casino games each year (\$90.66 vs. \$39.87).

**Table 3**  
**Average Annual Expenditures† on Casino Gaming - Per Adult**  
**(n=600), Past Year Casino Player (n=181)**

	Per Casino Player	Per Adult	% of Annual Casino Expenditures
Total Casino	\$198.66	\$64.93	100%
Total Slot Machines	\$148.73	\$48.61	75%
Total Table Games	\$49.93	\$16.32	25%
Halifax Casino	\$137.96	\$45.09	70%
Sydney Casino	\$60.90	\$19.84	30%

†NOTE: Due to small sample sizes, average expenditures were capped in order to reduce the influence of outliers on means.

**Figure 17**



Among past year casino game players, 6.5 hours were spent, on average, playing casino games in the past year ( $\bar{x}$  = 377 minutes; median = 120 minutes). Time spent playing slot machines



accounts for 87% of the total casino time expenditure ( $\bar{x}$  = 329 minutes; median = 120 minutes). Although table games account for 25% of reported out-of-pocket casino expenditures, they only account for 13% of the total casino time expenditures. While this is very exploratory, it does appear that inside of a casino, slot machines offer players a greater return in terms of time versus money spent playing casino games. Also noteworthy is that there was no difference in average time spent playing casino games in the past year, at either the Halifax casino or the Sydney casino ( $\bar{x}$  = 3 hours), although the median times are quite different (60 minutes versus 0 minutes, respectively). This suggests that there is a greater proportion of players who have played for a longer period of time over the past year at the Halifax casino.

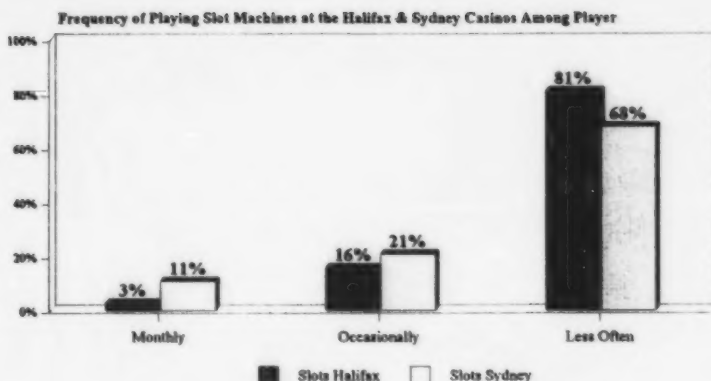
### **Slot Machines at a Casino**

Slot machines are the most popular form of gaming within the casino. In comparison with other casino games, four times as many people have ever tried slot machines and three times as many have played within the past year. However, only approximately 3% of players who have ever tried slot machines take up regular playing patterns. Although sample sizes were too small to estimate the continued adoption rate for table games, it is assumed to be below that of slot machines.

Fewer adults in Nova Scotia have played slot machines at the Sydney Casino than the Halifax Casino. Undoubtedly, there are geographic, socio-economic, and demographic reasons for the disparity. More simply, it is less convenient for the majority of Nova Scotians to visit the casino in Sydney. Comparisons of continued adoption measures between the two sites, however, suggest that more people return to the Sydney casino than the Halifax casino. Seven percent of those who try slot machines at the Sydney Casino continue to play regularly, whereas this is the case for only 2% at the Halifax Casino.

Most slot machine players describe their frequency of play as rare or seasonal (=68% - 81%). Between 3% and 11% of those who played casino games in the past year, played slot machines on a regular monthly basis.

**Figure 18**



### **Casino Table Games**

Other casino games include baccarat, blackjack, poker, and roulette. Games of this type appeal to a comparatively small proportion of the adult population. Overall, 11% of Nova Scotia adults have ever played casino table games at either the Halifax or Sydney Casinos, 9% have played in the past year, and 2% played in the past month. None of the adults in our survey could be characterized as regular monthly players.

Play of casino table games in the past year is related to gender, region and age. Men are twice as likely to have played casino table games (12%) than women (6%). Halifax county residents are also more likely to have played in the past year (14%) than those living in ROP (7%). Adults under 35 years of age are more likely to have played non-slot casino games in the past year (18%) than older adults (<6%).

Table games account for 25% of average monthly casino expenditure. In general, adults in the province spend \$16.32 each year playing table games at a casino. Among those who have played any casino games in the past year, about \$50 is typically spent each year playing table games. Monthly expenditure on table games is related to gender and age. Men spend six times more than women playing table games each year (\$28.38 vs. \$4.56) and younger adults (under 35 years) tend to spend more than those who are

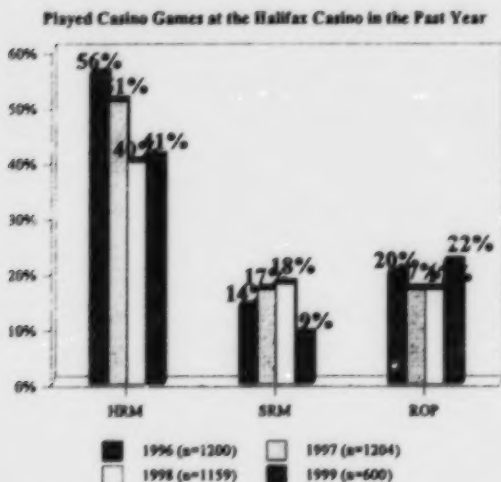
55 and older (\$40.33 vs. \$1.97).

### Participation at the Halifax Casino

Overall, 26% of adults in the province have played casino games at the Halifax casino in the past year. Participation in casino games at the Halifax casino is related to region, income and age. As expected, Halifax county residents are twice as likely to have played casino games at the Halifax casino (41%) than their regional counterparts (<22%). The relationship with age and income is linear. As income increases participation increases. Conversely, as age increase, participation decreases.

Although the regional segmentation in the current survey is somewhat different from previous surveys (e.g., the current survey is segmented at the county level rather than at the regional municipality level), there is enough similarity to warrant an informal analysis. In comparison with data since 1996, it appears that fewer adults from Cape Breton county have visited the Halifax casino in 1999 (14%-18% vs. 9%). This finding offers a possible explanation for the decrease in the proportion of people who have visited both casinos in the past year.

**Figure 19**



Most of those playing slot machines at the Halifax casino in the past year report their level of involvement as rare or seasonal (81%). Only 3% are playing on a monthly basis. These figures are not significantly different from frequency of play at the Sydney casino.

Seventy percent of average monthly casino expenditures are derived from the Halifax casino. Nova

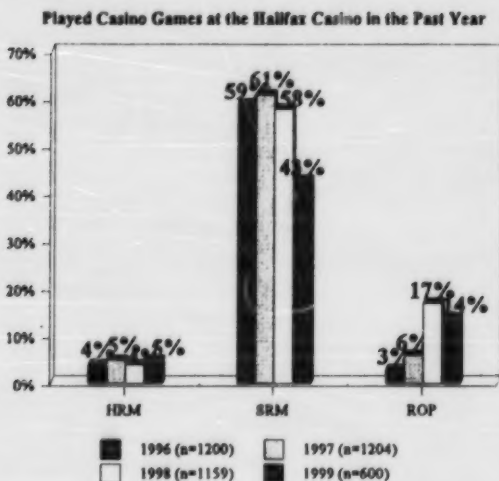
Scotia adults, in general, spend \$45.09 each year at the Halifax casino. Among those adults who have participated in casino gaming in the past year, \$137.96 is typically spent each month. Average monthly gaming expenditure at the Halifax casino is related to gender and region. Men typically spend twice as much as women each year (\$66.43 vs. \$24.31) and those adults from Halifax county spend more each year (\$74.70) than those from Cape Breton county (\$11.74).

### **Participation at the Sydney Casino**

In total, 9% of adults have played slot machines or table games at the Sydney casino. Participation in casino games at the Sydney casino was found to be related only to region. Very clearly, adults from Cape Breton county are significantly more likely to have visited the Sydney casino (43%) than those living elsewhere in the province ( $\approx 5\%$ ).

In comparison with data from 1996 thru 1998 (and applying the same caveats described for the Halifax casino), there are fewer adults from Cape Breton county visiting the Sydney casino in 1999 ( $\approx 60\%$  vs. 43%). It is very likely that this response among Cape Breton residents is contributing to the decline in gaming at the Sydney casino. While this finding may be partially due to methodological differences between the 1998 and 1999 surveys, it does suggest that the novelty for the Sydney casino may be wearing off for local residents. Thus, only those most motivated to play are continuing to go. If this is the case, in the absence of marketing initiatives to stimulate interest, further declines may be expected. Further analysis with a larger sample size is required to examine the full impact of casino gaming in Cape Breton.

**Figure 20**



Among those playing slot machines at the Sydney casino in the past year, 11% played monthly, 21% played occasionally, and 68% played less often.

Monthly expenditure at the Sydney casino accounts for 30% of casino gaming expenditures. Nova Scotia adults, in general, spend less than \$20 each year at the Sydney casino (\$19.84), whereas those who have

participated in casino games in the past year typically spend \$60.90. Monthly expenditure at the Sydney casino is related to region. In general, those adults from Cape Breton county spend more at the Sydney casino each year than those from the Rest of the Province (\$95.84 vs. \$1.27).

In terms of the past year, casino gaming is the third most popular form of gaming in Nova Scotia. However, there are fewer adults in 1999 who have played casino games than what was reported in 1996 through 1998. More specifically, there appears to be fewer adults playing exclusively at the Sydney casino and at both casinos. It appears that it is the local Cape Breton residents who are staying away from the Sydney casino. This suggests that the novelty for the casino in Sydney may be wearing off among Cape Breton residents.

The majority of casino game players played slot machines or table games very infrequently in the past year. In general, players played for about 6.5 hours in the past year, spending close to \$200 out-of-pocket. Total casino expenditures make up 11% of total gaming expenditures, the same as for bingo. Play of casino games is related to

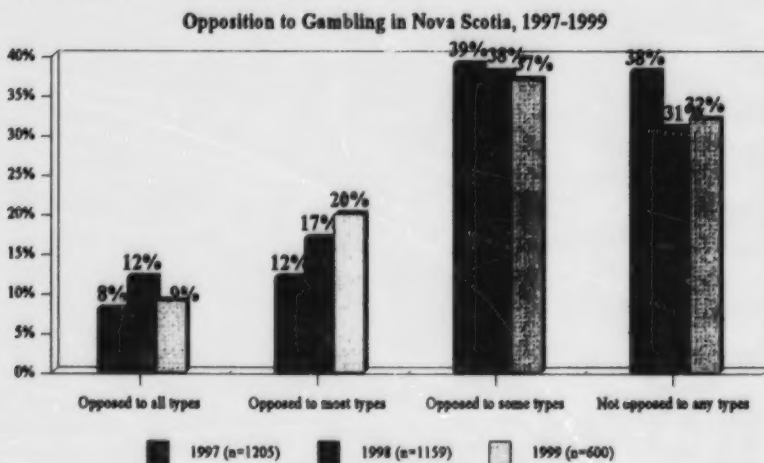
region, income and age. As expected, residents of the two casino locations are the most likely to engage in casino gaming. Of more interest, casino gaming increases with household income and decreases with age.

Inside the casino, slot machines are the game of choice for the greatest number of adults. Slot machines make up 75% of overall casino expenditure and account for 87% of the total time spent playing casino games. Table games, on the other hand make up 25% of casino expenditure and 13% of total casino gaming time. Although this is exploratory, the findings suggest that slot machine players are getting greater value in terms of time expenditure versus dollar expenditure. Further analysis with a larger sample size is needed to confirm this finding.

## ATTITUDES TOWARDS GAMBLING

### Opposition to Gambling in Nova Scotia

Figure 21



Similar to results last year, nearly one-third of adults in Nova Scotia are not opposed to any types of gambling activities currently available in the province. However, since 1997, opposition towards gambling has increased (62% to 68%), and this finding has persisted over the past two years.

Over the last year, it appears that opinions are becoming more specific and/or differentiated, as fewer adults are opposed to all types of gambling and are, instead, only opposed to most types.

Opposition levels by region<sup>4</sup> and by gender are also similar to 1998 results. It is noteworthy, however, that due to slight changes within each gender group, there are no longer any differences between the attitudes of men and women towards gambling.

Age is strongly related to opinions towards gambling in the province ( $r = -.28$ ). Older adults (55 years +) are significantly more likely to oppose *at least some* forms of gambling (77% versus 63% of younger adults), and are twice as likely to oppose all forms of gambling (17% versus 2% to 9% of younger adults).

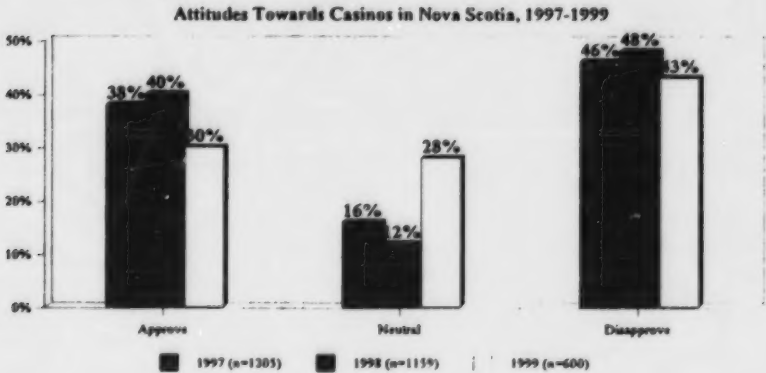
In 1999, there are no significant differences in opinion by income category, and virtually no association between opinions and education or household income levels.

---

<sup>4</sup>For the 1998 survey, the three regions were Halifax Regional Municipality, Sydney Regional Municipality, and Rest Of Province. Any comparisons within region from 1998 to 1999 must be interpreted with the knowledge that results may be influenced by differences in segmentation and weighting.

## Opposition to Casinos in Nova Scotia

Figure 22



Nova Scotians' opinions towards casinos in the province have shifted over the past year. Compared to 1998 results, adults are significantly less inclined to approve (also, to a lesser extent, disapprove) of casinos and are, instead, more than twice as likely to report having no opinion.

The decline in approval is evident in all three regions (Halifax County, Cape Breton County, and Rest of Province). While Halifax County continues to exhibit the highest levels of approval (35%), approval is now similar in both Cape Breton County and the Rest of Province (=26%). The majority (57%) of adults in Cape Breton County disapprove of casinos being available in Nova Scotia, a significantly higher proportion than noted in Halifax (38%).

As noted last year, approval of casinos remains associated with gender, age and income. While approval is now lower overall, men are still more inclined to approve and less inclined to disapprove of casinos than are women. As is the case with almost all approval ratings, there is also an inverse relationship with age ( $r=-.31$ ); adults in the youngest age category are more than twice as likely to approve of casinos than older adults (55 years+), and half as likely to disapprove. Conversely, the majority of those



reporting the lowest annual household incomes disapprove of casinos (54%), with only one-quarter indicating approval (versus approximately one-third of those in higher income categories).

**Table 4**  
**Play for Casino Games in the Last Year**  
**By Approval of Casinos, 1999 Only**

	Approve (n=166)	No Opinion (n=167)	Dis- approve (n=267)	TOTAL (n=600)
<b>Percent of Population</b>	<b>30%</b>	<b>28%</b>	<b>43%</b>	<b>100%</b>
Ever played any casino games	74%	49%	34%	50%
Ever played slot machines	70%	46%	33%	48%
Ever played table games	26%	6%	4%	11%
<b>PLAY IN LAST YEAR:</b>				
Played any casino games in last year	59%	27%	18%	33%
Played any slot machines in last year	55%	25%	17%	30%
Played any table games in last year	24%	2%	3%	9%

- indicates differences significant at the 95% confidence level ( $p < .05$ ).

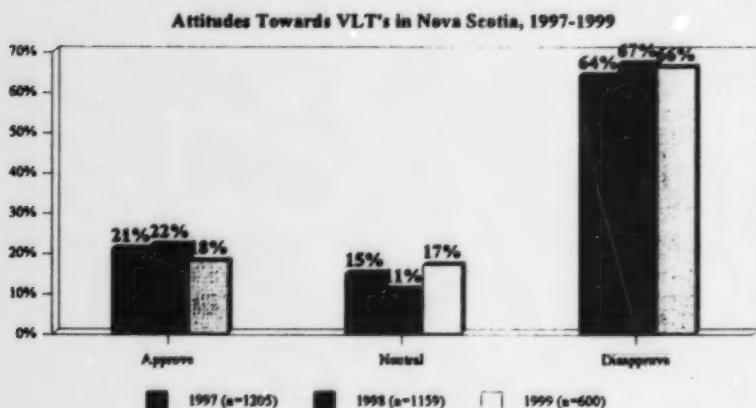
Not surprisingly, trial of casino games (i.e., those who have ever played) is directly related to approval of casinos in Nova Scotia. Nearly two-thirds of those who approve of casinos have played casino games at some time in the past, primarily slot machines. This rate of trial for casino games declines to one-half of those who are neutral, with only one-third of those who disapprove of casino gaming having ever tried the games.

It is noteworthy that approximately one-quarter of those who approve of casinos in the province have tried casino table games, with almost all of these adults having played table games within the past year. This rate of trial is four to six times higher than noted for the remaining approval segments. This suggests that a relationship exists between play of table games and approval of casinos, although the causality is not apparent. It may be that enjoyment of table games influences approval, or conversely, those who approve of casinos are more likely to have played table games at a casino location.

However, it should also be noted that 18% of those who disapprove of casinos in Nova Scotia have played casino games in the past year.

## Opposition to VLT's

Figure 23



Approval of VLT's in Nova Scotia has declined slightly since 1998, although adults appear to have become more neutral rather than negative in their opinions. Disapproval has remained stable over the past three years, with approximately two-thirds of adults either somewhat or strongly disapproving of the machines' availability in the province.

The increased neutrality is attributable primarily to those living outside of both Halifax and Cape Breton counties. Slight declines in both approval and disapproval have resulted in twice as many adults in this region indicating they have no opinion towards VLT's being available in the province (1998: 10% to 1999: 20%). Higher levels of neutral response are noted for both males and females compared to last year, although men remain more favourable towards VLT's than women (23% of men approve versus 12% of women).

As noted last year, age is significantly associated with approval of VLT's ( $r = -.23$ ). This relationship is mainly due to response by older adults (aged 55+ years). More than three-quarters of adults over 54 years of age disapprove of VLT's in the province (76% versus 60% to 64% for those aged 19 to 54 years), and only 9% approve of the machines (versus 17% to 24% of younger adults). In 1999, there is no association observed between VLT approval and annual household income level, nor education.

**Table 5**  
**Play & Expenditure for VLT Games in the Last Year**  
**By Approval of VLT's, 1999 Only**

	Approve (n=99)	No Opinion (n=107)	Disapprove (n=394)	TOTAL (n=600)
<b>Percent of Population</b>	<b>18%</b>	<b>17%</b>	<b>66%</b>	<b>100%</b>
Total adults ever played VLT's	58%	30%	22%	30%
Played VLT games in last year	51%	18%	13%	20%
Played VLT games in last month	24%	10%	5%	9%

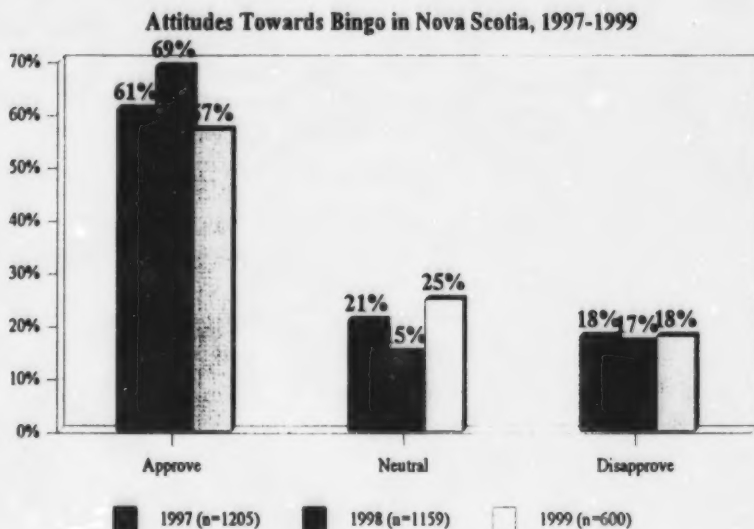
 - indicates differences significant at the 95% confidence level ( $p < .05$ ).

With regard to play and expenditures on VLT's by approval levels, the primary finding noted in 1998 is confirmed in 1999; those who approve of

VLT's are significantly more likely to have played the games. A disapproving opinion (either somewhat or strongly) does not preclude some adults from playing VLT games, with 5% of adults in this approval segment indicating play within the past month.

## Opposition to Bingo

Figure 24



As reported for VLT's, attitudes towards bingo in Nova Scotia have also become less favourable and more neutral over the past year. This shift results in approval levels similar to those found in 1997. The majority of adults in Nova Scotia approve of bingo's availability, with one-quarter offering no opinion and a consistent 18% indicating disapproval.

The return to previous levels of approval is evident primarily in counties outside of Halifax, although the proportion of adults with no opinion increased across all three regions. In 1999, there are no differences in

response by region. Approval declined (and neutrality increased) for both males and females compared to last year, though to a greater degree for females. As a result, gender no longer differentiates opinions towards bingo in the province. This reinforces the possibility that some adults may not consider bingo to be “real gambling”, particularly since women are significantly more likely to have ever played bingo and to have continued playing (in the last year, the last month, and on a regular basis) yet approval for this activity is similar regardless of gender.

As is the case for the other types of gambling, attitudes towards bingo is associated with age ( $r = -.25$ ). Again, approval for bingo decreases with age and, concurrently, disapproval increases. There is no relationship apparent between household income or education level and attitudes towards bingo.

**Table 6**  
**Play for Bingo (in Bingo Halls and/or TV/Satellite Bingo) in the Last Year By Approval of Bingo, 1999 Only**

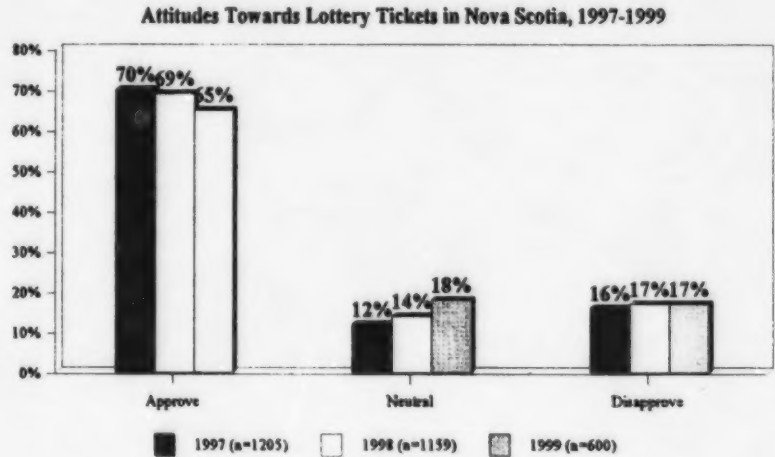
	Approve (n=337)	No Opinion (n=107)	Dis approve (n=394)	TOTAL (n=600)
Percent of Population	57%	25%	18%	100%
Ever played any Bingo	46%	28%	27%	38%
Played Bingo in last year	22%	10%	8%	17%
Played Bingo in last month	10%	1%	5%	6%

- indicates differences significant at the 95% confidence level ( $p < .05$ ).

Trial or play of bingo does differ significantly among those who disapprove or are neutral towards its availability in Nova Scotia. Also, the majority of those who approve of bingo have never tried the game (either in a bingo hall or via TV bingo). This underscores bingo’s “social acceptance” throughout the province for most adults, regardless of whether or not they have personally experienced the game.

# Opposition Towards Lottery Tickets

Figure 25



Overall, approval towards lottery ticket games in Nova Scotia has slowly declined over the past three years, moving from 70% in 1997 to 65% in 1999. The shift is reflected in a higher proportion of adults indicating they now have no opinion on the issue. When the ratings within each response category are examined, however, results show that opinions have become more strongly favourable in the province. The proportion of adults reporting they “strongly approve” (rating of 5/5 on a 5-point scale) of lotteries increased from 4% in 1998 to 12%, while those indicating they just “approve” (rating of 4/5) declined from 65% to 53%. Therefore, the increase in those most strongly supportive of lottery ticket gaming was offset by those who became more non-committal on the issue.

Approval of lottery tickets is differentiated by region, gender and age. Respondents in Halifax County are more inclined to approve of lotteries than those in the rest of the province (i.e., excluding Cape Breton County) (71% approve versus 62%). Men (73%) are more likely to approve than

women (59%) who are, instead, more inclined to respond neutrally (22% of women versus 14% of men). Age is a strong determinant of attitudes towards gambling and the availability of gambling options, and lottery tickets are no exception. As age increases, approval of lotteries declines while disapproval increases.

**Table 7**  
**Play for Lottery Ticket Games in the Last Year By Approval of Lottery Tickets, 1999 Only**

	Approve (n=337)	No Opinion (n=151)	Disapprove (n=112)	TOTAL (n=600)
<b>Percent of Population</b>	<b>65%</b>	<b>18%</b>	<b>17%</b>	<b>100%</b>
Total Adults Ever Played Any Lottery Tickets	97%	86%	68%	90%
Played Lottery Tickets in last year	94%	78%	54%	85%
Played Lottery Tickets in last month	68%	42%	30%	57%

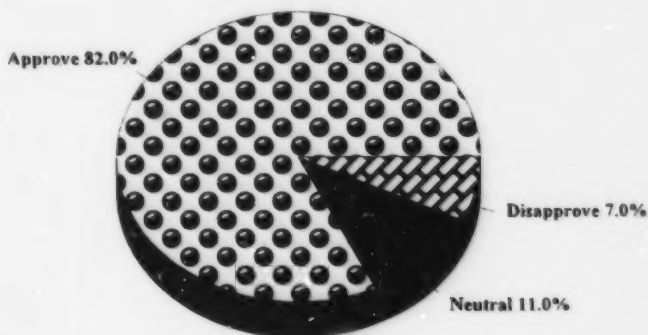
 - indicates differences significant at the 95% confidence level ( $p < .05$ ).

The strong majority of adults have tried lottery ticket games at some time in the past (90%), with 94% of these same adults buying at least one ticket during the past year (85% of the adult population). These play measures are directly related to approval of lottery tickets, with those who approve most likely to have played or purchased tickets and those who disapprove, least likely. However, more than two-thirds of disapproving adults have tried lottery games, and the majority bought one or more tickets within the past year. In fact, nearly one-third of those who report disapproval towards lottery tickets in Nova Scotia played in the last month, with most of these adults (53%, or 16% of adults who disapprove) reporting play of at least one type of lottery ticket on a regular, monthly basis.

## Opposition Towards Charity/Non-ALC Lotteries & Draw in Nova Scotia, 1999

Figure 26

Attitudes Towards Charity/Non-ALC Lotteries & Draws in Nova Scotia, 1999



*NOTE: Approval of Charity/Non-Atlantic Lottery Corporation Lotteries and Draws was measured for the first time in 1999's survey.*

**Non-ALC or charity raffles and draws ranked most favourably of all gambling options measured in terms of approval.** More than one-quarter (26%) of Nova Scotian adults strongly approve of this type of ticket, with more than half (56%) indicating they approve. Only 7% of Nova Scotian adults either disapprove (4%) or strongly disapprove (3%) of this type of gambling activity.

There are no significant differences in approval by region, gender or household income category. The only demographic distinction is once again by age, with older adults (55+ years) least likely to approve of charity raffles/draws overall (74% versus  $\approx 86\%$  in the remaining age categories). However, this is due to a smaller proportion indicating they strongly approve (12% versus 28% to 37%). In fact, those over 54 years of age are



more inclined to report they just "approve" of this type of gambling that adults under 35 (62% versus 50%).

**Table 8**  
**Play for Charity/Non-ALC Lotteries & Draws in the Last Year**  
**By Approval of Charity/Non-ALC Lotteries & Draws, 1999 Only**

	Approve (n=495)	No Opinion (n=65)	Dis approve (n=40)	TOTAL (n=600)
<b>Percent of Population</b>	<b>82%</b>	<b>11%</b>	<b>7%</b>	<b>100%</b>
Ever played Charity/ Non-ALC Lotteries/ Draws	74%	55%	40%	70%
Played Charity/ Non- ALC Lotteries/ Draws in last year	69%	43%	32%	64%
Played Charity/ Non- ALC Lotteries/ Draws in last month	21%	15%	11%	20%

 - indicates differences significant at the 95% confidence level ( $p < .05$ ).

Those who approve of charity/Non-ALC lotteries and draws are significantly more likely than other adults to have ever played this type of ticket game, and to have played during the last year. However, there are no statistical differences among opinion segments for play in the last month, or for average annual expenditure on charity draws. Charity raffles or draws are second only to lottery tickets in terms of trial and play by those who indicate they disapprove, and the only category of gambling for which disapproving adults are just as likely as those who approve to have bought at least one ticket during the past month. As well, charity lotteries/draws reflect the largest discrepancy between approval of gambling overall and approval of a specific activity. Nearly half (49%) of adults who report being opposed to all forms of gambling in Nova Scotia indicate that they do, in fact, approve of charity draws. This instance of opposing

opinions is distantly followed by lottery tickets, for which 18% of those opposed to all gambling approve of lottery tickets. This reinforces the notion that some games of chance played for money/prizes may not be considered as “real” gambling by a significant proportion of adults in the province, particularly gambling when a charitable aspect is involved.

### Comparative Analysis of Opinions Towards the Five Gambling Options

Figure 27

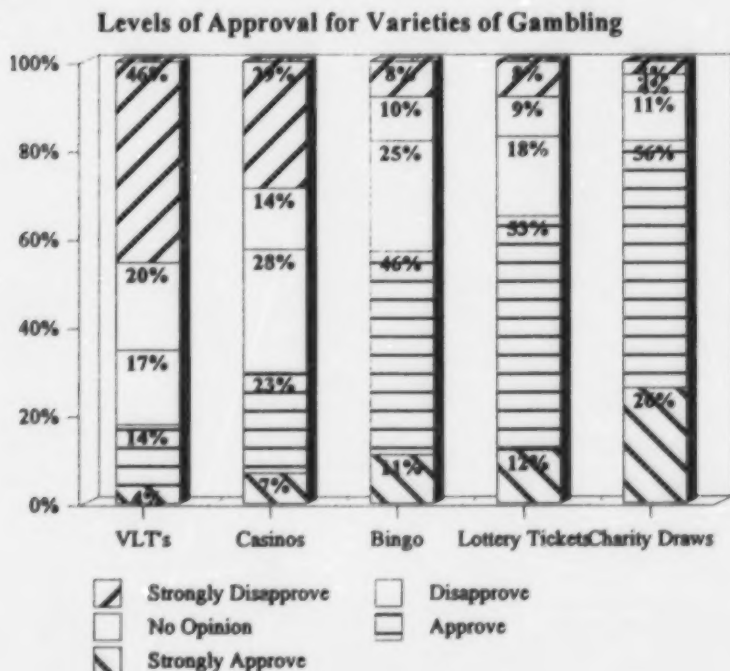


Figure 27 above illustrates the variability of adults' opinions towards various gambling activities available in Nova Scotia. VLT's comprise the

only gambling activity of which the majority of adults disapprove (66% either strongly disapprove or disapprove). Interestingly, VLT's also represent the gambling activity with the lowest level of trial (only 30% of adults have ever played a VLT game). This suggests that, for VLT's anyway, factors other than direct experience with the games (e.g., media treatment, contact with/knowledge of problem VLT players) are influencing the opinions of the majority of adults in the province. At the other end of the spectrum, 82% of adults either approve or strongly approve of charity/Non-ALC lotteries/draw games, including 49% of those who previously reported they are opposed to all forms of gambling in the province.

#### Strength of Relationships Between Opposition to Gambling & Approval of Various Gambling Activities

Figure 28

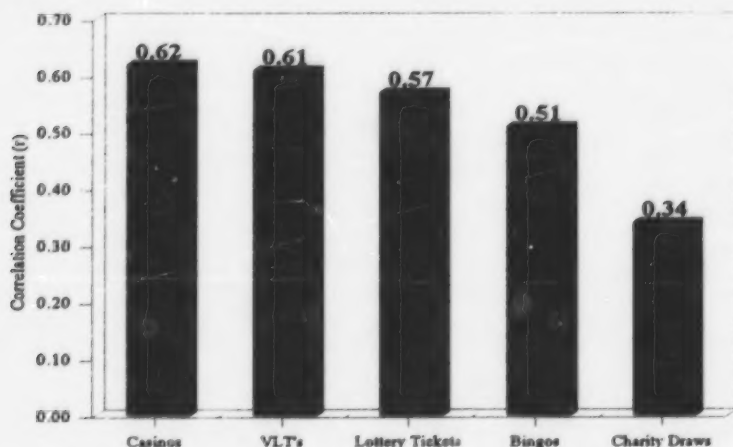


Figure 28 above illustrates the strength of the relationships between opposition to gambling in Nova Scotia and level of approval for each type of gambling activity measured (correlation coefficients; 1.0 represents a perfect relationship). It is evident that approval levels are significantly associated with opinions towards gambling overall for each gambling

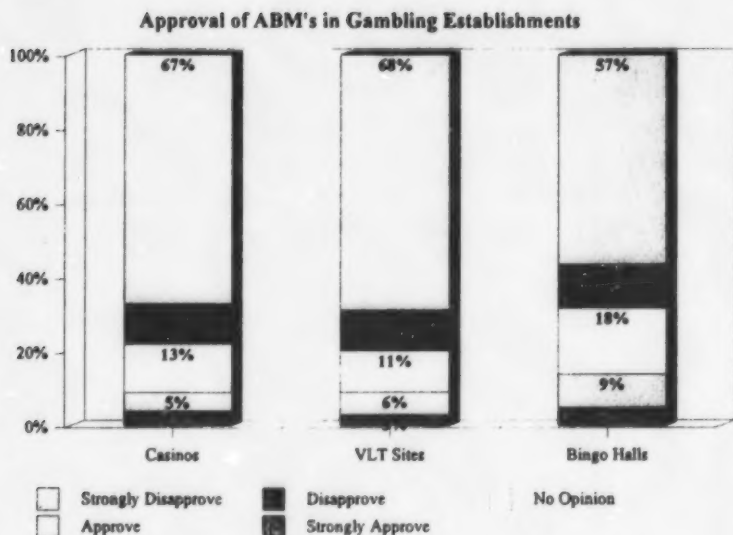
activity, however, the relationship is nearly twice as strong for such activities as casino gambling and VLT's than for charity lotteries/draws. It appears that not all games of chance are "considered equal" in terms of their acceptability. In fact, attitudes towards VLT's and casino gaming are related most strongly to approval for gambling in general in Nova Scotia.

Overall, opposition to gambling in Nova Scotia has increased and appears to have become more selective. Although one-third of adults are not opposed to any of the games of chance currently available in the province, this level of support has declined since 1997 (38% versus 32%), while those opposed to most types of gambling has steadily increased (12% to 20%). Approval of video lottery and casino gaming are most strongly related to opinions towards general gambling in Nova Scotia. While VLT's continue to elicit the highest levels of opposition (66%), and least amount of support (18%), casino gambling appears to be becoming a more contentious issue, especially in Cape Breton County, where half of adults now disapprove of the availability of casino gaming. In fact, adults in general have moved from a positive (40% to 30%) to a more neutral position (12% to 28%) in response to casinos. This shift over the past year suggests that adults' attitudes towards casino gaming are subject to change. New and/or additional information could serve to further sway public opinion. Currently, approval has declined, suggesting issues for Nova Scotians surrounding casino gaming could be addressed before opinions become more entrenched and negative.

## **APPROVAL OF ABM'S IN GAMBLING ESTABLISHMENTS**

All respondents were asked to describe their level of approval, using a 1 to 5 scale (1 meaning strongly disagree and 5 meaning strongly agree), of having automated bank machines (ABM's) located in the following types of gambling establishments: casinos, video lottery terminal sites, and bingo halls/locations.

Figure 29



The strong majority of adults in the province disapprove to some degree of ABM's being located in each of the three types of gambling establishments. In fact, 57% (for bingo halls) to two-thirds (67% for casinos and 68% for VLT sites) strongly disagree with ABM availability on-site. Only 9% to 14% indicate any level of approval, with similar proportions responding neutrally.

There is *some* variation in response, with 28% of adults indicating some level of approval for ABM location in certain establishments but not others. However, there is a great deal of consistency in opinions with nearly two-thirds (65%) of adults indicating disapproval for all three types of gambling establishments having ABM's, and the remaining 7% approving of ABM's in all three establishments.

There are significant differences in approval levels by region. Adults residing in Halifax County are less likely than those in Cape Breton or the rest of the province to strongly disapprove of ABM availability in casinos

(58% versus 69% to 77%) or bingo halls (48% versus 59% to 64%). Halifax County residents are also less likely to strongly disapprove of ABM's in VLT sites than those in Cape Breton County (62% versus 79%). Adults in Halifax County are instead more inclined to respond neutrally. It may be that ABM's are more widely available throughout the Halifax County area and this may be tempering disapproval for adults who live in this region. Despite the differences noted for disapproval, the minority of those who favour ABM's being available in each type of location is similar in all regions.

Women are more inclined to disapprove, to some degree, of ABM's in each of the three gambling establishments than men. For casinos, 83% of women disapprove, compared to 72% of men. Results are similar for VLT sites; 86% of women disapprove versus 73% of men. In both cases, women are instead more inclined to be neutral. Approval of ABM's in either casinos or VLT sites is similar for both genders. Interestingly, with regard to bingo halls, women are not only more likely to disapprove, but are also less inclined to approve of ABM availability. More in-depth analysis could determine the impact of higher play levels of bingo on opinions for women (and, thus, more experience in a bingo hall location).

Age is also a determining factor in opinions towards ABM availability in gambling establishments. In each case, as age increases, disapproval increases and approval significantly declines. This is not surprising considering that the same relationship occurs for both play and approval of each type of gambling in Nova Scotia. There are no significant differences among annual household income categories for any of the three gambling establishments.

**Undoubtedly, the strong majority of adults in Nova Scotia, regardless of even their current involvement in gaming activities, do not endorse the availability of Automated Bank Machines (ABM's) in gambling sites or venues. While casino and VLT locations elicit the strongest levels of disapproval, approval of ABM's in casinos (9%), VLT sites (9%) and bingo venues (14%) are extremely low. Again, results**

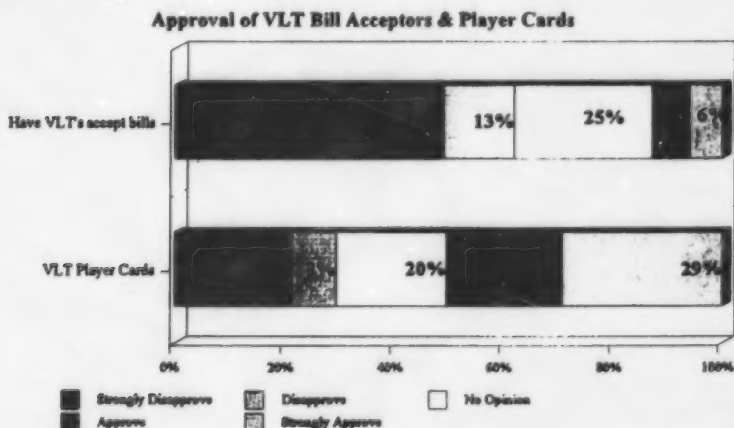
suggest regulations impacting players' access to on-going funds while gambling should be well received, and may serve to address public concerns surrounding the issue.

## APPROVAL OF VLT BILL ACCEPTORS & PLAYER CARDS

All respondents were asked to describe their level of approval, using a 1 to 5 scale (1 meaning strongly disagree and 5 meaning strongly agree), of the following practices:

- having video lottery machines in Nova Scotia accept both bills and coins, rather than just coins; and
- in order to play video lottery games, you would need a player card which you have to swipe on the VLT before you can play. The card would let each player track their time and money spent, and would also allow for tracking of video lottery play in the province.

Figure 30



Response is very different towards each of the two proposed practices for VLT play. Overall, the majority (62%) of adults indicate some level of

disapproval towards bill acceptors on VLT's, with almost half (49%) reporting strong disapproval. In fact, only 13% of respondents indicated any level of approval for the concept. Conversely, half of all adults approve of the introduction of VLT player cards (29% strongly approve). One-fifth are neutral, with a similar percentage indicating strong disapproval (21%).

**Of the two VLT modifications examined, the adoption of a VL player card system was viewed more favourably than the addition of bill acceptors on the machines. This is not particularly surprising given that the former concept can be seen to introduce controls over play, while the latter is likely to be perceived as facilitating expenditure (see Attitudinal Statements - Factor 1 for insight as to the attitudes impacting responses).**

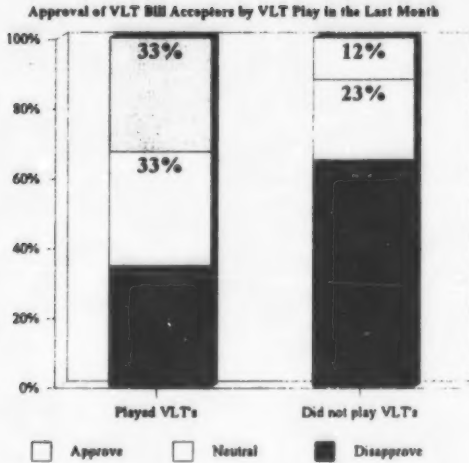
#### **Approval of Bill Acceptors - By Region, Gender, Age, Income & VLT Play**

Residents of Cape Breton County tend to be less neutral towards the idea of bill acceptors on VLT's than those in Halifax County (14% versus 33%). While those in Cape Breton County are twice as likely to at least somewhat approve of bill acceptors (18% versus 9%), a significantly larger proportion also strongly disapprove of the idea (60% versus 44%).

Although the majority of adults respond negatively to the concept, men are much more receptive to bill acceptors than women, with men significantly more inclined to strongly approve (9% versus 3%) and less inclined to strongly oppose the idea (56% versus 69%). As might be expected, compared to their younger counterparts, older adults (55+ years) are more likely to disapprove (74% versus 53% to 61%), and less likely to approve of the addition of bill acceptors to VLT's (6% versus 13% to 21%).



**Figure 31**



VLT players are fairly equally divided into thirds by their response to bill acceptors on VLT's. Adults who did not play VLT games in the past month are twice as likely to disapprove of allowing VLT's to accept bills as well as coins, with only 12% approving of the concept.

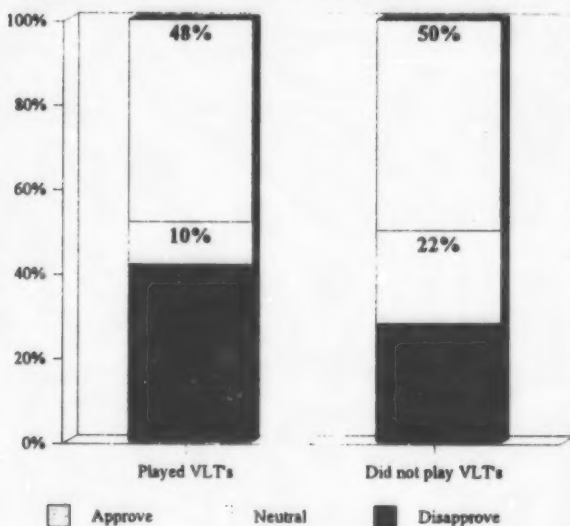
The majority (63%) of adults in Nova Scotia respond negatively towards the modification of VLT machines to allow players to insert bills rather than just coins. In fact, half of adults in the region disapprove strongly of the concept of bill acceptors. Even the players themselves are split on the issue. While VL players account for almost one-quarter (23%) of all those who approve of the modification, these adults, who are most likely to be impacted by the change, are equally likely to approve (33%) or disapprove (35%), with the remaining one-third uncommitted at present. The results suggest that such a change would serve to engender increased opposition to video lottery in the province, even for those who play the games.

## Approval of VLT Player Cards - By Region, Gender, Age, Income & VLT Play

There are no differences in approval levels of VLT player cards by region or by gender. Interestingly, older adults (55+ years) are least likely to approve of player cards for VLT's (36% versus ~55%), but instead are most inclined to respond neutrally (30% versus 12% to 21%). Given that older adults are less likely to be VLT players, it may be that a lack of familiarity with the games is contributing to their more neutral response. Adults in higher income households (more than \$50K) are more inclined to approve of player cards compared to those in lower income homes (up to \$25K) (57% versus 45%) and less likely to be neutral (14% versus 25%).

Figure 32

Approval of VLT Player Cards by VLT Play in the Last Month



Interestingly, adults who played VLT games in the past month are just as likely as those who did not to approve of the player card concept. However, VLT players are much more likely to be split on the issue, with a higher percentage indicating disapproval to being required

to swipe a card before play for tracking purposes, and less inclined to be neutral towards the idea.

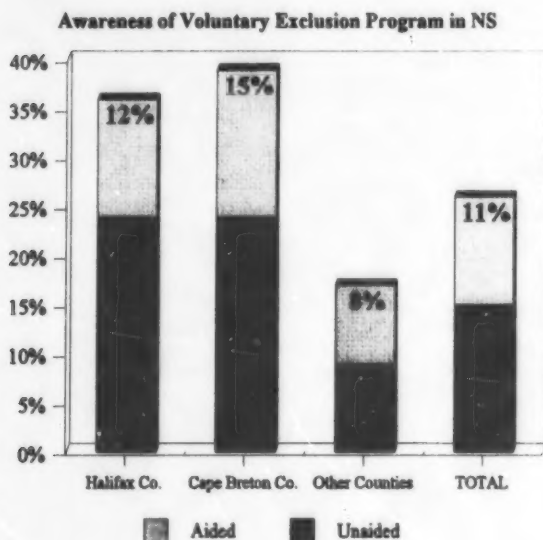
It may be advisable to further examine the responses of the players towards the concept, in order to identify the barriers impacting approval.

**Response towards having players required to use a player card in order to track and monitor their VL play was viewed more favourably, with 50% indicating some level of support. The players themselves were equally supportive (48%). However, while the remaining adults are split between opposition (28%) and having no opinion (22%), video lottery players are skewed towards disapproval (42%). It may be necessary to further explore the players' response towards the concept to identify key areas of concern impacting support by the players themselves for such a concept.**

## EVALUATION OF VOLUNTARY EXCLUSION PROGRAM

### Awareness of Voluntary Exclusion Program

Figure 33



All respondents were asked if they had ever heard of a program at the casinos in Nova Scotia called *Voluntary Exclusion*. Approximately 15% of all adults in the province reported top-of-mind awareness for the program (i.e., unaided awareness prior to being read a description). Nearly half of these same adults (7% of

Nova Scotian adults) were able to correctly define the Voluntary Exclusion program, as judged using the following definition: "Voluntary Exclusion allows a person to formally seek assistance in staying out of the casinos. The person voluntarily signs a form that indicates they do not want to be allowed in the casino. This voluntarily bans them from attending the two provincial casinos for an indefinite period of time. The casino keeps a picture of the person on file and if the casino staff identifies the person, they immediately remove them by escorting them off the casino premises."

A similar proportion (6% of adults; approximately 40% of those with top-of-mind awareness of the program) were partially correct when asked to define the Voluntary Exclusion process. Only 13% of those indicating awareness (2% of adults) were not at all correct in their unaided interpretation of what the Voluntary Exclusion process includes.

Respondents were then read the complete description (above) of the current Voluntary Exclusion program and asked if they had ever heard of it (aided awareness). Hearing the definition prompted recall of the program for an additional 11% of adults. In total, just over one-quarter of adults (26%) are familiar with Voluntary Exclusion. This suggests that communication of the program reached upwards of 175,000 adults, in total, throughout the region. The fact that the majority of those aware of the program were able to accurately describe it, top-of-mind, suggests that most of those exposed to the program are able to retain its primary details.

Not surprisingly, those in Halifax County (24%) and Cape Breton County (24%) were more than twice as likely to report top-of-mind awareness of the program than adults in the rest of the province (9%). Those in households with higher annual income levels (\$50K+) were also twice as likely as those in low income households (up to \$25K) to recall the program prior to hearing a description (21% versus 10%). These awareness levels correspond with higher prevalence of casino gaming; adults in Halifax and Cape Breton counties are much more likely to have tried casino games in Nova Scotia, and to have played in the past year. Trial and play in the last year for casino games are also significantly higher for adults in the highest income category versus the lowest.

It is interesting to note that the above pattern does not hold true for age. Trial and play in the last year for casino games in the province are both inversely related to age, with those in the youngest age category (under 35 years) more than twice as likely to have tried and/or played casino games than those over 54 years. However, there are no differences in awareness of the Voluntary Exclusion program by age category. It may be that younger adults who reside in higher income homes (e.g., students, still living with their parents, young adults with numerous roommates) are more inclined to visit a casino, but are less likely to pay attention to any information regarding the Voluntary Exclusion program. Conversely, it may be that older adults were effectively targeted by communication efforts for the program.

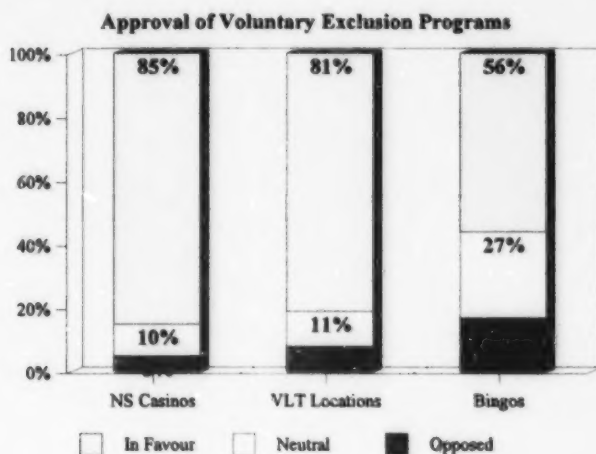
There is also no differentiation by gender in terms of program awareness (nor in play of casino games). However, it is noteworthy that men who report top-of-mind awareness of the Voluntary Exclusion program are more familiar with the details of the process. The majority of men who recall the program (unaided) could correctly define it (53% versus 32% of women), while half of women with top-of-mind awareness were partially correct in their definition (50% versus 35%). Once prompted (i.e., heard the complete definition), men and women were equally likely to recall the program.

## **APPROVAL OF VOLUNTARY EXCLUSION PROGRAMS**

All respondents were asked to rate their opinion towards Voluntary Exclusion programs being available for each of three types of gambling: in Nova Scotia casinos, in establishments which have video lottery machines, and for bingos. Respondents used a 5-point scale, where 1 means strongly opposed and 5 means strongly in favour, to rate their approval.

## Approval of Voluntary Exclusion Programs

Figure 34



Overall, the majority of Nova Scotian adults are at least somewhat in favour of offering Voluntary Exclusion programs for each of casinos, VLT locations and bingos. Adults tend to be more neutral or

opposed to the programs for bingos, however, as compared to either casinos or establishments with VLT's in the province.

With regard to casinos, nearly three-quarters of adults in the province are strongly in favour of the Voluntary Exclusion program (73%). Support is highest in Cape Breton County, with 85% strongly in favour of the program, versus approximately 72% in the remaining regions. Although Nova Scotians over 54 years of age are least inclined to be strongly in favour (65%) compared to those in the younger age categories ( $\approx 76\%$ ), a total of 80% of these older adults show at least some support for the program at casinos. As noted for most other approval measures in the survey, older adults tend to be more conservative in their opinions and indicate neutrality rather than opposition. Greater exposure to casino gaming for those in the oldest age category may also influence opinions to some degree and could be examined in greater detail through additional analysis. Approval of the Voluntary Exclusion program in Nova Scotia

casinos is similar for males versus females, and among annual household income segments.

**Overall, response is similar for introducing Voluntary Exclusion programs for establishments having video lottery machines in the province as for casinos.** The strong majority of adults (81%) indicate some level of approval, with more than two-thirds (68%) strongly in favour. Interestingly, there are no differences by region in support for the program in VLT establishments, indicating that adults in Cape Breton County may have stronger feelings regarding casino gambling than VLT gambling. Women are more supportive towards Voluntary Exclusion for VLT's, with 85% in favour versus 77% of men. Women are also half as likely to indicate any level of opposition (5% versus 10%). Again, older adults are less supportive and more neutral, and there are no differences in opinions by income segment.

**There is greater opposition to the idea of Voluntary Exclusion programs for bingos in Nova Scotia, although only 17% of adults report some level of opposition.** More than one-quarter (27%) are neutral and the majority (56%) are in favour. The distributions for opinions are similar among provincial regions, and by gender. Older adults are again most inclined to be neutral towards Voluntary Exclusion programs at bingos, and are less likely to be in favour versus those in the middle age category (35 to 54 years). Approximately two-thirds (67%) of adults in higher income households (>\$50K) are in favour, with nearly half (46%) strongly in favour versus about one-third (35%) of adults with lower annual household income levels.

**In summary, while just over one-quarter of adults were aware of the current Voluntary Exclusion program available at Nova Scotia's casinos, support for the program by those participating in the survey is high. Interestingly, there is no relationship between play of casino games (trial and/or play in the last year) and approval of the program. Also, adults who had not heard of the program prior to the survey were equally likely to approve of it as those who were more familiar with the program. This is also the case for both VLT's and bingos;**

neither play of the games nor prior awareness of the Voluntary Exclusion process are related to approval. This suggests that opposition to the Voluntary Exclusion process, for any type of gambling, is likely based on extraneous factors (perhaps concerns regarding program administration (e.g., costs, control mechanisms, cynicism regarding program effectiveness, etc.) rather than being influenced by personal experience with the gambling activity. Regardless, the majority of adults in the province indicate support for Voluntary Exclusion programs for each type of gambling and these levels of approval should not be significantly affected by prior awareness levels. However, effective communication of such programs to adults in the province may be beneficial in addressing some of the public's concerns surrounding the availability of some forms of gaming, especially casinos and VLT's. The results suggest that further research assessing effective methods of offering and supporting voluntary exclusion are warranted.

## **AWARENESS OF PROBLEM GAMBLING**

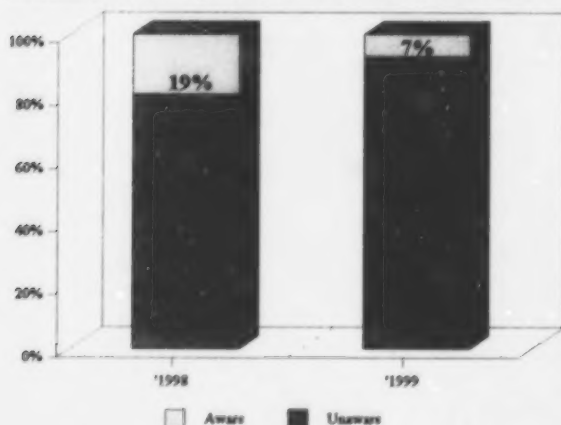
### **Perceived Prevalence of Problem Gambling**

Despite the amount of attention problem gambling has garnered over the past few years, there is still a high degree of uncertainty for adults in Nova Scotia surrounding the number of Nova Scotians directly experiencing such difficulties.



**Figure 35**

**Awareness of the Percentage of Nova Scotians Who Are Problem Gamblers**



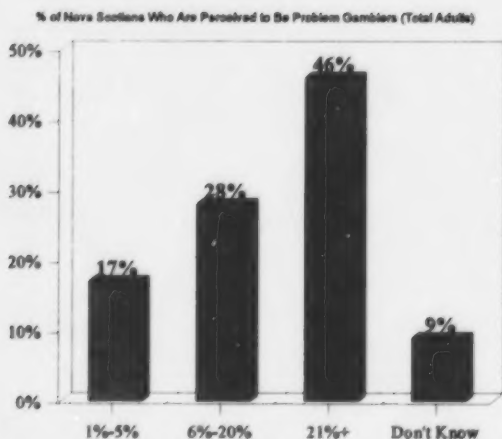
When asked if they knew what percentage of adults in Nova Scotia are considered problem gamblers, the vast majority of respondents (93%) indicated they did not know or were unsure.

Compared to 1998, there is

now a lower proportion of those who report they are knowledgeable concerning the rate of problem gambling (19% versus 7%). However, when respondents were further queried to disclose the percentage they "thought" were involved in problem gambling, only 9% were unable to provide an estimate.

Typically, studies of the prevalence of problem gambling across almost all jurisdictions in Canada and the United States tend to produce estimates which fall between 1% and 5% of the adult population (Shaffer, Hall & Vanderbilt; 1997). In Nova Scotia, similar findings have been reported (Omnifacts; 1993, Baseline Market Research; 1996, Focal Research Consultants; 1998) and, yet, in the 1998 NSAGA Survey of the Prevalence and Perceptions of Gaming in Nova Scotia, when adults were asked what percentage of the population they thought were considered to be problem gamblers, only 5% of respondents stated a problem gambling rate in Nova Scotia of less than 5%. There was 6% of the sample in 1998 who felt the rate fell between 6% and 20% of the population, with 8% reporting rates above 21%. The majority did not know (81%).

**Figure 36**

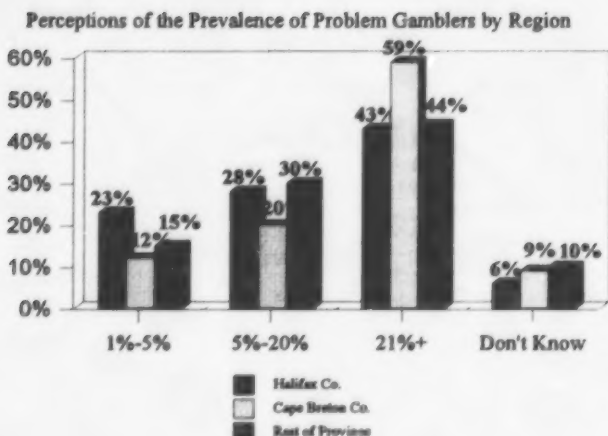


In 1999, only 2% of respondents confirmed top-of-mind knowledge of a current rate of 1% to 5% for problem gambling in Nova Scotia. However, when respondents were allowed to express their opinions as to what they think the rate may be, those citing figures under 5% rose to 17% of the sample. An additional 28% noted percentages from 6% to 20%. It is

noteworthy, however, that almost half (46%) of the survey respondents believe 21% or more of the adult population in Nova Scotia are problem gamblers. Thus, it appears that although adults in Nova Scotia are hesitant to commit to knowledge of a confirmed and official rate of problem gambling, the majority (91%) have an “unofficial” opinion as to the prevalence of the problem.

Certainly, in comparison to empirical measures, general perceptions as to the prevalence of problem gambling tend to be skewed considerably higher. In fact, respondents report, on average, 25% of adults in Nova Scotia could be considered problem gamblers, with approximately 50% noting a problem gambling rate below 20% and approximately 50% indicating rates above this level.

**Figure 37**



On a regional basis, perceptions surrounding the prevalence of problem gambling in Nova Scotia, on average<sup>5</sup>, are lower in Halifax County (21%) than in either Cape Breton County

(33%) or the rest of the province (25%).

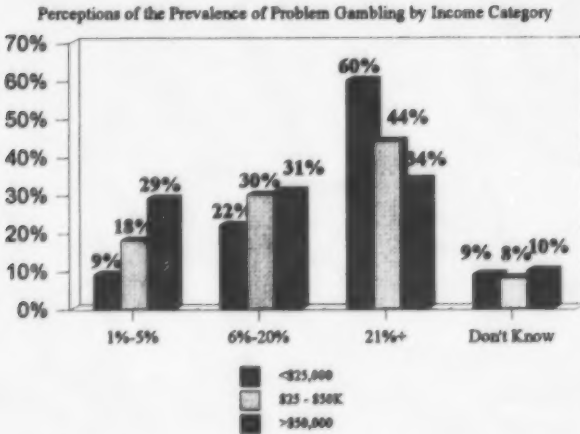
Halifax County residents are significantly more likely than adults anywhere else in Nova Scotia to report figures of 5% or less (23% versus 12% to 15%). In contrast, the estimates provided by those residing in Cape Breton County are skewed considerably higher, with the majority reporting problem gambling rates above 20% (59% versus ~44%).

Overall, men are inclined to provide more conservative estimates of problem gambling, with the majority (57%) reporting rates below 20%. In fact, over twice as many men cite rates of 5% or less, as compared to women in Nova Scotia (24% versus 10%). Women are more unsure in this regard (12% versus 5%) and when they do provide an estimate, they are more inclined to believe the problem affects in excess of 20% of the adult

<sup>5</sup>To minimize the impact of outliers on mean estimates, the top 5% of responses were excluded from the calculation (problem gambling rates of 70% or higher). A trimmed mean was considered inappropriate for the current analysis, as the bottom 5% of responses (i.e., lowest ratings of 1% to 2%) are considered accurate estimates of the prevalence of problem gambling.

population (55% versus 37%).

Figure 38



In terms of income categories, it appears that estimates of problem gambling are inversely related to income. Essentially, those with lower household incomes (\$25,000 or less) report higher

estimates of problem gambling in the province. Conversely, those with the highest household incomes (\$50,000+) are significantly more likely to cite rates within the officially recognized range of less than 5% (29%) and least inclined to note rates in excess of 20% (34%).

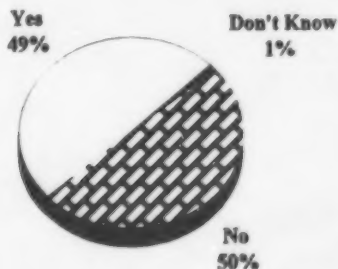
Age differences are less pronounced, although adults under 35 years of age, on average, report higher levels of problem gambling estimates (28% versus 22%), with 60% of those 19 to 34 years of age believing problem gambling rates in Nova Scotia are above 20%, as compared to only 40% of those 35 years of age or older. It is noteworthy that older adults (55 years+) are more unsure on the issue than other adults in the region (18% versus 2% to 8%).

The demographic differences noted suggest that those living in Halifax County, men and those with higher household incomes, are generally more likely to provide lower estimates of the prevalence of problem gambling within Nova Scotia and are significantly more inclined to cite rates of 5% or less. Conversely, it appears women, adults under 35 years of age, those with the lowest household incomes (<\$25,001), and those living in Cape Breton County are more inclined to feel problem gambling is more prevalent in the province. While it could be argued that the findings are indicative of differences in the dissemination of information on problem gambling among the various population segments, it may also reflect differences in personal experience and exposure to the issue.

### Exposure To Problem Gambling

**Figure 39**

Personal Awareness of a Past or Present Problem Gambler (Total Adults)



To assess the extent to which adults in Nova Scotia are exposed to problem gambling, all survey respondents were asked if they personally know of anyone in the province who has or has had a problem with

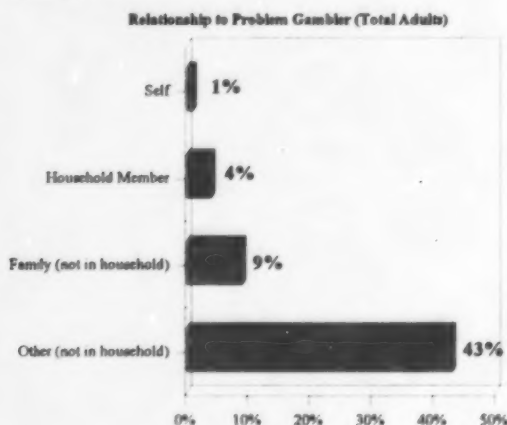
their gambling.

Overall, almost half (49%) of all adults in Nova Scotia indicated that they have some personal knowledge of a problem gambler.

To gain additional insight as to the potential impact of problem gambling

for adults in Nova Scotia, respondents were further questioned to determine their relationship to the problem gambler(s).

**Figure 40**



Approximately 1% of respondents indicated they, themselves, are a problem gambler, with 4% reporting at least one individual in their household has ever had a problem with their gambling.

Given the survey methodology used and the information gathered on a household basis, it was possible to derive estimates of problem

gambling which could be projected to the population at large.

During the survey, respondents indicated the number of individuals in their households they consider to be problem gamblers. Furthermore, all respondents indicated the total number of adults living in their households. As the sampling for the current survey was based on a random selection of adults (See Appendix A for detailed sampling procedures), it was possible to determine estimates of the proportion of adults perceived to be problem gamblers relative to all adults in the province.

**In total, approximately 2.87% of adults are estimated by respondents to be problem gamblers in Nova Scotia, with a margin of error of  $\pm 1.34\%$  at the 95% confidence level. This means that, based on adults' reports of problem gambling at a household level, the problem gambling rate in Nova Scotia will fall between 1.53% and 4.21% of the adult population. It is noteworthy that this rate, based solely on adults' perceptions, does not differ significantly from the estimates obtained using**

more complex and standardized problem gambling screens (e.g., South Oaks Gambling Screen (SOGS), DSM IV).

As noted in the 1998 NSAGA study, conducted by Sterling Research, as the measure of problem gambling moves outside of household estimates, there is a tendency for over-counting or duplicate counting to occur such that more than one individual can be aware of and affected by a single problem gambler. **While these percentages, on an absolute basis, appear to overstate the prevalence of the problem, they are still effective indicators of the magnitude of impact a relatively small group of individuals can have on the population at large.**

For example, 4% of adults live with at least one problem gambler. Given that approximately 3% of adults are considered to be problem gamblers by others living in the same household, it can be estimated that approximately 1.4 other adults and approximately 0.8 children under 19 years of age are directly affected by each problem gambler. An additional 9% of adults report less direct impact through family members who they do not live with. **In fact, the results suggest that for every problem gambler, approximately five other family and/or household members are also affected to some extent.**

**Table 9**  
**Types of Gaming Associated with Problem Gambling**

	% of Adults (n=600)	% of Those Personally Aware of Problem Gambler (n=292)	% of Those with Family Problem Gambler (not in household) (n=53)	% of Those with Problem Gambler in Household (n=23)
VLT's	40%	81%	83%	84%
Slot Machines (at casino)	10%	21%	15%	21%
Table Games (at casino)	3%	6%	2%	—
Bingo (in bingo halls)	3%	7%	10%	—
Instant Lottery Tickets	3%	7%	4%	3%
Card Games (not at a casino)	2%	3%	2%	6%
Other	3%	7%	3%	3%

All respondents who indicated they personally knew of someone who has a problem with gambling were asked which type of gaming was associated with the problem. Table 8 presents the responses for total adults and within particular segments of interest. The segments are not mutually exclusive and, therefore, tests of significance are not appropriate. However, by examining the responses within each segment, it is possible to assess the associations between the type of gaming and problems, as the individual's relationship to the problem gambler becomes closer and more relevant.

**Undoubtedly, video lottery gambling is overwhelmingly cited by adults**



**in Nova Scotia as the primary gaming activity associated with problem gambling.** In fact, regardless of an individual's relationship to the problem gambler, VLT's are reported to be playing a role in approximately 81% to 84% of the problem gambling that adults report they are exposed to in Nova Scotia.

**Slot machines are a distant second, although they are mentioned at least three times as often as any other form of gaming.** Given the similarity of slot machines to video lottery, the result is not particularly surprising. Slot machines are seen to be playing a role in problem gambling for approximately 21% of those who have any personal knowledge of a problem gambler and those living in a household with such an individual. It is assumed that the availability of slot machines in only two restricted locations in the province is serving to mitigate problems with slot machine gaming.

Problems related to **bingo, instant lottery tickets, casino table games and card games outside of a casino** are associated with problem gambling to a much lesser extent by adults in the region. To a certain degree, the response towards video lottery positions these other gaming options as comparatively, substantially less problematic. Yet, for those engaged in problem play of other games of chance, the negative impacts are likely just as severe.

It could be argued that media treatment of the VL issue may have sensitized individuals to the hazards of video lottery play, thus, making them more prone to associating problem gambling with VLT's. Regardless, the revenues contributed by this type of gaming, in conjunction with the increase in the demand for problem gambling services and support since VLT's were introduced, coincide with adults' perceptions of the relationship between video lottery and, to a lesser extent, slots and casino gaming, and problem gambling.

### **Regional Differences**

There is no difference in exposure to problem gambling between those residing in Halifax County (44%) or Cape Breton County (46%), although

---

**IMPORTANT NOTE CONCERNING THE FOLLOWING  
PAGES**

**THE PAGES WHICH FOLLOW HAVE BEEN FILMED  
TWICE IN ORDER TO OBTAIN THE BEST  
REPRODUCTIVE QUALITY**

**USERS SHOULD CONSULT ALL THE PAGES  
REPRODUCED ON THE FICHE IN ORDER TO OBTAIN  
A COMPLETE READING OF THE TEXT.**

---

**REMARQUE IMPORTANTE CONCERNANT LES  
PAGES QUI SUIVENT**


**LES PAGES SUIVANTES ONT ÉTÉ REPRODUITES EN  
DOUBLE AFIN D'AMÉLIORER LA QUALITÉ DE  
REPRODUCTION**

**LES UTILISATEURS DOIVENT CONSULTER TOUTES  
LES PAGES REPRODUITES SUR LA FICHE AFIN  
D'OBTENIR LA LECTURE DU TEXTE INTÉGRAL**

adults living outside of these regions (Rest of Province: 53%) are significantly more likely to report they personally know of a problem gambler than those living in the Halifax region. The perceived household incidence of exposure to problem gambling is similar in all areas of the province ( $\approx 3\%$  -  $4\%$ ). Thus, the difference is largely attributable to higher reported awareness of problem gambling by non-household family members and other community residents. This finding is not surprising, given the higher incidence of rural and "smaller town" residents in the "Rest of Province" region, where individuals are likely to be more familiar with the individuals living in their communities. There are distinct regional differences, however, in the types of gaming associated with problem gambling.

**Table 10**  
**Types of Gaming Associated with Problem Gambling by Region**

	Total Adults			Of Those Aware Of Problem Gamblers		
	Hfx. Co (n=179)	CB Co. (n=83)	ROP (n=338)	Hfx. Co (n=80)	CB Co. (n=39)	ROP (n=173)
% of Population	31%	13%	56%	31%	13%	56%
VLT's	36%	25%	45%	81%	54%	86%
Slot Machines	12%	27%	6%	26%	60%	11%
Table Games (at casino)	5%	7%	1%	11%	15%	3%
Bingo (in bingo halls)	2%	4%	4%	4%	8%	8%
Card Games (not at a casino)	2%	4%	1%	4%	8%	2%
Instant Lottery Tickets	<1%	6%	4%	1%	14%	8%
Other	3%	2%	4%	6%	4%	8%

 - indicates differences significant at the 95% confidence level ( $p < .05$ ).



adults living outside of these regions (Rest of Province: 53%) are significantly more likely to report they personally know of a problem gambler than those living in the Halifax region. The perceived household incidence of exposure to problem gambling is similar in all areas of the province ( $\approx 3\%$  -  $4\%$ ). Thus, the difference is largely attributable to higher reported awareness of problem gambling by non-household family members and other community residents. This finding is not surprising, given the higher incidence of rural and "smaller town" residents in the "Rest of Province" region, where individuals are likely to be more familiar with the individuals living in their communities. There are distinct regional differences, however, in the types of gaming associated with problem gambling.

**Table 10**  
**Types of Gaming Associated with Problem Gambling by Region**

	Total Adults			Of Those Aware Of Problem Gamblers		
	Hfx. Co (n=179)	CB Co. (n=83)	ROP (n=338)	Hfx. Co (n=80)	CB Co. (n=39)	ROP (n=173)
% of Population	31%	13%	56%	31%	13%	56%
VLT's	36%	25%	45%	81%	54%	86%
Slot Machines	12%	27%	6%	26%	60%	11%
Table Games (at casino)	5%	7%	1%	11%	15%	3%
Bingo (in bingo halls)	2%	4%	4%	4%	8%	8%
Card Games (not at a casino)	2%	4%	1%	4%	8%	2%
Instant Lottery Tickets	<1%	6%	4%	1%	14%	8%
Other	3%	2%	4%	6%	4%	8%



- indicates differences significant at the 95% confidence level ( $p < .05$ ).

For the Rest of Province region, video lottery is significantly more likely to be viewed as problematic (45%) than in either Halifax (36%) or Cape Breton (25%) counties. The difference in results between Halifax County and the Rest of Province is largely due to higher reported awareness levels for problem gambling, in general, in the Rest of Province (53% versus 44%). In fact, when the data is examined only for those aware of any problem gamblers, the percentage noting video lottery as the source of the problem is almost identical in both areas (86% versus 81%). However, in Cape Breton County, adults report significantly fewer problems associated with VLT's (25%), with only approximately half (54%) of the problems with gambling in this County attributed to video lottery.

**In Cape Breton County, slot machines are just as likely to be perceived as problematic (27%), with 60% of those familiar with a problem gambler citing slot machines as the source.** Cape Breton County residents mention slot related problem gambling more than twice as often as those in Halifax County (27% versus 12%), despite casinos being available in both regions. Rates for the casino table games tend to be similar in both these counties (5% to 7%). As would be expected, both types of casino gaming are seen to play a much lesser role in problem gambling throughout the rest of the province (casino table games: 1%; slot machines: 6%).

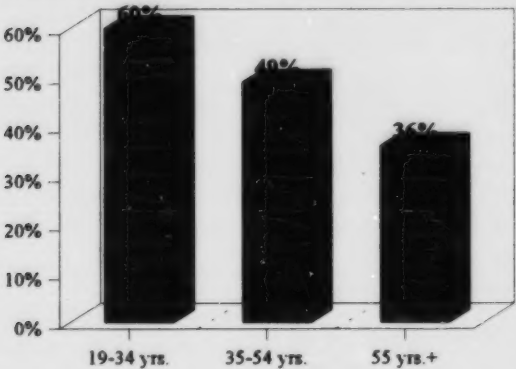
**In general, while VLT's are a primary issue in all regions, there appears to be greater diversity in the gambling problems experienced in Cape Breton. Card games outside of the casino are noted more often as problematic in Cape Breton County than elsewhere in Nova Scotia. While sample sizes are too small to yield reliable statistical differences, it appears that problems with instant lottery ticket gaming and bingo may also be more relevant to Nova Scotia residents living outside of Halifax County.**

**Other Demographic Differences**

There is an inverse relationship between personal exposure to problem gambling and age.

**Figure 41**

Personal Awareness of a Problem Gambler in NS by Age



A majority (60%) of younger adults (under 35 years of age) personally know of a problem gambler. This age segment tends to report the highest levels of direct household exposure, with over twice as many adults under 35 years of age living with at least one problem gambler ( $\approx 8\%$  versus  $\approx 2\%$  -  $3\%$ ). They also are

twice as likely to report problem gambling by family members outside of their households (14% versus 7%). Again, video lottery is noted more often as the source of problematic gaming by these younger adults (50% versus 39-54 years: 42%; 55 years+: 24%). The only notable difference was observed for bingo, with adults over 55 years of age significantly more inclined to mention bingo associated with problem gambling (7% versus  $\approx 2\%$ ).

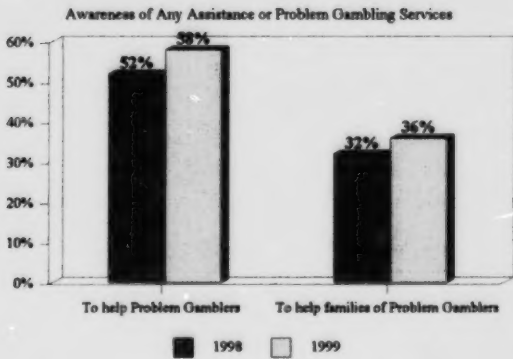
The only notable finding based on income was a significantly lower reported rate of exposure to problem gambling at a household level for those with mid-incomes of \$25,001 to \$50,000 (2%), as compared to those with lower (\$25,000 or less: 8%) and higher (\$50,000+: 7%) annual household incomes.

It is possible to further delineate those most likely to be directly impacted

by problem gambling through additional analysis.

**AWARENESS & USE OF PROBLEM GAMBLING SERVICES**

**Figure 42**



General awareness of services to assist problem gamblers appears to have improved over the past year (52% to 58%), although awareness of services to assist the families continues to be substantially lower (36%).

Despite the apparent gain, one-quarter of those who indicated they know such programs and services exist were unable to recall any specific resources currently in place to assist problem gamblers. This means that only 43% of adults in the region are able to cite specific problem gambling services. **Thus, while adults in general are becoming more aware such services exist, there is a need to link this awareness to actual service provision.**

There are few regional or demographic differences in general awareness levels, with the exception of age. Similar to the results noted for exposure to problem gambling, younger adults (19 - 34 years) are most likely to both know such services exist (68%) and to be able to refer to specific assistance services and programs (52%). Awareness levels decline with age. It is noteworthy that there is no such age skew observed for awareness of programs or services to assist family members in coping with problem gambling.

**Gamblers Anonymous** continues to be the most familiar problem gambling service mentioned by 31% of adults, or approximately 72% of all those who are able to recall any specific assistance services offered in the



province. Gamblers Anonymous (G. A.) is noted by almost twice as many adults in Cape Breton County than elsewhere in the province (42% versus 27% to 29%). In fact, 93% of those aware of any problem gambling services in Cape Breton County are mentioning G. A.

The **Gambling Helpline** appears to have achieved higher awareness levels since 1998. There are now 10% of adults noting the Gambling Helpline as a source of assistance versus only 6% last year. Overall, 23% of those who are able to recall specific problem gambling services are now recalling the Helpline. Halifax County residents are most likely to cite the Gambling Helpline (15%), whereas those in Cape Breton County are least inclined to be aware of this service (3%). This is noteworthy as the Helpline is based in this region. It appears that communication of the Helpline services has been more effective elsewhere in the region (Rest of Province: 9%) than in Cape Breton County. Adults under 35 years are also more likely to be aware of the Helpline service than those 35 years or older (15% versus ≈7%). Presumably, the inclusion of the number on video lottery terminals is contributing to this awareness pattern for age, as younger adults tend to have higher direct exposure to the machines.

**Overall, 87% of all those who are aware of any assistance services for problem gambling in Nova Scotia cite Gamblers Anonymous and/or the Gambling Helpline. Thus, these two services, collectively, are currently accounting for the majority of service awareness in Nova Scotia.**

**Drug Dependency (Addictions Services)** (3% of adults; 7% of those aware of specific services) and **other community services and gambling self-help groups outside of G. A.** (2% of adults; 4% of those aware of specific services) have not gained any further recognition, but continue to be noted by a small, yet apparently distinct, subsegment of the population, comprised primarily of those most likely to be directly impacted by problem gambling. Of those who indicate they have personally sought out information or assistance, 27% are aware of Drug Dependency as a source of assistance and 22% mention community and self-help groups.

## **IMPORTANT NOTE CONCERNING THE FOLLOWING PAGES**

**THE PAGES WHICH FOLLOW HAVE BEEN FILMED  
TWICE IN ORDER TO OBTAIN THE BEST  
REPRODUCTIVE QUALITY**

**USERS SHOULD CONSULT ALL THE PAGES  
REPRODUCED ON THE FICHE IN ORDER TO OBTAIN  
A COMPLETE READING OF THE TEXT.**

---

## **REMARQUE IMPORTANTE CONCERNANT LES PAGES QUI SUIVENT**

**LES PAGES SUIVANTES ONT ÉTÉ REPRODUITES EN  
DOUBLE AFIN D'AMÉLIORER LA QUALITÉ DE  
REPRODUCTION**

**LES UTILISATEURS DOIVENT CONSULTER TOUTES  
LES PAGES REPRODUITES SUR LA FICHE AFIN  
D'OBTENIR LA LECTURE DU TEXTE INTÉGRAL**

In total, 4% of all adults report they have sought out information and/or assistance on problem gambling. Given the small sample size (n=21), the results within this group should be considered exploratory, but do coincide with findings from other larger scale studies (NS 1997/98 VL Players Survey). It appears that the majority of those contacting problem gambling services are doing so in effort to assist someone else.

Individuals are likely to be accessing more than one source, once they resolve to obtain information or help. The Gambling Helpline is referred to most often for help (36%), followed by Gamblers Anonymous (26%), church/religious groups (18%), and family doctor or therapist (13%). Overall, a variety of other sources are mentioned (37%), which indicates a high level of variance in the efforts individuals undertake to obtain information or help.

**Problem Gambling in Nova Scotia appears to be relevant to a significant proportion of adults across the province. Although the estimated prevalence of problem gambling, based on adults' reported exposure, at a household level, falls between 1% to 4% of the adult population, this relatively small group undoubtedly impacts other adults, both directly and indirectly, across the province. In fact, approximately 12% of adults are directly affected by household or close family members' involvement in problem gambling. An additional 37% report personal exposure to the problem through friends or acquaintances only. Thus, while a small proportion of individuals are characterized as problem gamblers, their gambling has potential consequences for many other adults in the region, with currently almost half of all Nova Scotians reporting they are personally aware of some of these consequences, for at least one problem gambler in the province.**

**Interestingly, only half (49%) of those who have any first-hand knowledge of a problem gambler are aware of specific services in place to offer assistance or help. Awareness levels increase to approximately 68% for those living with a problem gambler. Again, G. A. (36%) and the Gambling Helpline (24%) are noted most often, which indicates**

**the importance of these services in providing information and referrals since, in the majority of cases, the individuals seeking assistance will not be the problem gambler.**

## **ATTITUDINAL STATEMENTS**

Attitudes were measured using a 5-point analog scale of strongly disagree to strongly agree. There were nineteen statements designed to address certain areas of interest as they relate to gambling in Nova Scotia. The statements were grouped using principal component analysis into five factors. The five attitudinal factors identified are as follows:

**FACTOR 1 - Problem Gambling Education, Information & Assistance**

**FACTOR 2 - Gambling Benefits**

**FACTOR 3 - Restricted Access & Advertising**

**FACTOR 4 - Gambling As A High Risk Behaviour**

**FACTOR 5 - Other**

The statements within each factor are presented for total adults. However, the true value of the analysis lies in comparison among segments of interest. Such analysis is beyond the scope of this analysis, although key differences in response between the primary regional and demographic segments are noted for consideration. Additional analysis could be undertaken to further identify the significance of attitudinal differences and the relationship of attitudes to opinions and behaviours.

**In total, 4% of all adults report they have sought out information and/or assistance on problem gambling.** Given the small sample size (n=21), the results within this group should be considered exploratory, but do coincide with findings from other larger scale studies (NS 1997/98 VL Players Survey). It appears that the majority of those contacting problem gambling services are doing so in effort to assist someone else.

Individuals are likely to be accessing more than one source, once they resolve to obtain information or help. The Gambling Helpline is referred to most often for help (36%), followed by Gamblers Anonymous (26%), church/religious groups (18%), and family doctor or therapist (13%). Overall, a variety of other sources are mentioned (37%), which indicates a high level of variance in the efforts individuals undertake to obtain information or help.

**Problem Gambling in Nova Scotia appears to be relevant to a significant proportion of adults across the province. Although the estimated prevalence of problem gambling, based on adults' reported exposure, at a household level, falls between 1% to 4% of the adult population, this relatively small group undoubtedly impacts other adults, both directly and indirectly, across the province. In fact, approximately 12% of adults are directly affected by household or close family members' involvement in problem gambling. An additional 37% report personal exposure to the problem through friends or acquaintances only. Thus, while a small proportion of individuals are characterized as problem gamblers, their gambling has potential consequences for many other adults in the region, with currently almost half of all Nova Scotians reporting they are personally aware of some of these consequences, for at least one problem gambler in the province.**

**Interestingly, only half (49%) of those who have any first-hand knowledge of a problem gambler are aware of specific services in place to offer assistance or help. Awareness levels increase to approximately 60% for those living with a problem gambler. Again, G. A. (46%) and the Gambling Helpline (24%) are noted most often, which underscores**

**the importance of these services in providing information and referrals since, in the majority of cases, the individuals seeking assistance will not be the problem gambler.**

## **ATTITUDINAL STATEMENTS**

Attitudes were measured using a 5-point analog scale of strongly disagree to strongly agree. There were nineteen statements designed to address certain areas of interest as they relate to gambling in Nova Scotia. The statements were grouped using principal component analysis into five factors. The five attitudinal factors identified are as follows:

FACTOR 1 - Problem Gambling Education, Information & Assistance

FACTOR 2 - Gambling Benefits

FACTOR 3 - Restricted Access & Advertising

FACTOR 4 - Gambling As A High Risk Behaviour

FACTOR 5 - Other

The statements within each factor are presented for total adults. However, the true value of the analysis lies in comparison among segments of interest. Such analysis is beyond the scope of this analysis, although key differences in response between the primary regional and demographic segments are noted for consideration. Additional analysis could be undertaken to further identify the significance of attitudinal differences and the relationship of attitudes to opinions and behaviours.

## FACTOR 1 - Problem Gambling Education, Information & Assistance

Table 11

	Agree	Neutral	Disagree
People who encounter problems with their gambling need to have help readily and easily available to them	90%	5%	5%
I think people in general need more information on how to manage or control their gambling	83%	11%	7%
The government should be responsible for offering programs to help Problem Gamblers and their families	80%	10%	10%
The government needs to take a more active role in promoting and educating people on how to gamble responsibly	68%	16%	16%
I feel there is too much attention given to problem gambling in NS	14%	14%	73%

*NOTE: Due to rounding, percentages do not total to 100%.*

The statements comprising Factor 1 are all related to agreement on issues of improved government involvement in promoting and educating people on how to gamble responsibly (i.e., how to manage or control their gambling), and on enhancing the provision of and access to problem gambling services in the province. Conversely, adults responding most strongly on these measures are also inclined to disagree that too much attention is given to problem gambling in Nova Scotia.

There is high consensus on all the measures. Not only do adults agree that

**problem gamblers need easy access to support services (90%) and that the government should be responsible for offering such programs and services (80%), but also that people, in general, need more information on how to manage or control their gambling (83%).** This suggests that there is interest in a preventative approach to problem gambling. Although the majority endorse **the government assuming a more active role in promoting and educating adults on responsible gambling**, agreement on this issue is slightly more mixed (68%). At this time, only 14% of adults feel **there is currently too much emphasis or attention placed on problem gambling**, suggesting this is a topic which should remain on the agenda for the majority of Nova Scotians.

Those living in Cape Breton County (77% versus 60% - 61%) and those with annual household incomes under \$25,000 (74% versus ~61%) are significantly more likely to **strongly agree** that governments should be responsible for offering programs to help problem gamblers. This is also true for the government's role in promotion and education on responsible gambling (Region: Cape Breton County: 60% versus 41% - 46%; Income: <\$25,000: 56% versus 40% - 43%).



## FACTOR 2 - Gambling Benefits

Table 12

	Agree	Neutral	Disagree
Gambling such as lotteries and games of chance are a good way for charities to raise money	62%	19%	18%
Gambling such as lotteries, casinos and other games of chance are a good way for governments to generate revenue	54%	13%	32%
For the most part, gambling and games of chance are fun and entertaining	48%	19%	32%
Lotteries and government operated games of chance give people a reasonable chance to win	20%	17%	62%

The second factor emerging from the analysis focuses on the economic and entertainment benefit of gaming activities in Nova Scotia. Agreement on these four measures tends to be most strongly interrelated. Levels of endorsement, in general, in Nova Scotia are all substantially lower than for issues surrounding prevention and problem gambling support services. However, for a significant proportion of the population, gaming, in general, is perceived to offer benefits in the province.

**The use of gambling proceeds to generate funds for charity** elicits the highest level of support (62%) and lowest levels of opposition (18%). While government use of this source of revenue is endorsed less strongly, just over half (54%) of adults acknowledge agreement that **gambling such as lotteries, casinos and games of chance are a good way for the government to generate funds**. Support for this approach tends to decline as annual household incomes increase (<\$25,000: 61%; \$25-50,000: 54%;

\$50,000+: 48%). Likewise, a similar relationship is noted for age (19-34 years: 61%; 35-54 years: 54%; 55 years +: 48%). As a result, almost half (42%) of adults with the highest household incomes (i.e., \$50,000+) and adults over 55 years of age disagree with the government use of gambling to generate revenues.

The entertainment value of gambling is recognized with almost half (48%) of adults in agreement **that gambling, for the most part, is fun and entertaining**. Not surprisingly, adults over 55 years of age are least inclined to agree with this position (39% versus 53% - 61%), which is consistent with the lower level of involvement in gaming activities by older adults in the province.

There is general consensus that **games of chance operated by the government do not offer players a reasonable chance of winning**, with 62% of adults disagreeing with the statement. In fact, aside from the response towards, "I feel there is too much attention given to problem gambling in Nova Scotia," with 49% strongly disagreeing, the statement surrounding "a reasonable chance to win" evoked the highest levels of disagreement (39% Strongly Disagree). In terms of agreement, those with the lowest incomes (<\$25,000) were more inclined to agree than those with household incomes beyond \$50,000/year (26% versus 15%).

### FACTOR 3 - Restricted Access & Advertising

Table 13

	Agree	Neutral	Disagree
Similar to tobacco and alcohol advertising, there should be restrictions on advertising for gambling and games of chance	76%	12%	12%
I think gambling in Nova Scotia takes advantage of those who can least afford to play	70%	15%	15%
Gambling advertising encourages children and youth to gamble	61%	17%	22%
Advertising for gambling encourages people to gamble too much	61%	17%	22%
I would prefer VLT's were reduced or eliminated in Nova Scotia, even if it meant higher taxes for me	55%	18%	26%
There is too much advertising and promotion for gambling in Nova Scotia	48%	24%	28%

There are six statements comprising Factor 3, which largely centre on concerns surrounding the promotion and accessibility of gambling. It appears that the perceptions that **gambling takes advantage of those who can least afford to play** (70% agreement) are associated with desires for advertising restrictions to avoid targeting vulnerable groups.

Adults in Cape Breton County are more likely than those in Halifax County to **strongly agree that advertising for gambling encourages people to gamble too much** (45% versus 27%). This also tends to be true for older

adults (55 years +: 45%) and those with lower household incomes (<\$25,000: 45%). Those who disagree with the statement (22%) fall similarly across all segments examined, except by region, where Cape Breton residents are least likely to dissent (13% versus ~23%).

While 76% of adults across the province agree that **advertising for gambling and games of chance should be restricted**, one-half (51%) strongly endorse this statement. In fact, Cape Breton County residents (60%), older adults (55 years +: 60%), those with annual household incomes under \$25,000 (58%), and women in the province (55%) are all significantly more likely to strongly agree with **restrictions on gambling advertising similar to other regulated products such as alcohol and tobacco**. Similar results are noted in response to **advertising encouraging children and youth to gamble**, with the population segments noted above most likely to agree with this statement as well.

While the majority of adults collectively report they are unsure (24%) or in disagreement (28%) in response to the **amount of advertising and promotion for gambling in Nova Scotia**, this overall result is largely due to lower agreement by men (43%), those living in Halifax County (38%), and those with the highest annual household incomes (\$50,000+: 40%). In almost all other segments, the percentage agreeing that there is too much gambling advertising and promotion exceeds 50%. This suggests that certain groups such as women, those with incomes below \$50,000/year, and those living outside Halifax County are either exposed to more advertising or have less tolerance for the practice.

It is noteworthy that a slight majority of adults (55%) in the province indicated agreement that they would **prefer VLT's were reduced or eliminated in Nova Scotia, even if it means higher taxes for them personally**. Only 13% are strongly opposed to this statement, with males significantly more likely to indicate any disagreement than women (32% versus 21%) or to be strongly opposed (17% versus 10%). Again, age and income are related to response; as both measures increase, so too does agreement with the statement.

The results suggest that a significant proportion of adults in the province report that they are willing to incur at least some personal cost in addressing concerns surrounding the availability of video lottery in Nova Scotia.

#### FACTOR 4 - Gambling As A High Risk Behaviour

Table 14

	Agree	Neutral	Disagree
Everyone who gambles will, on occasion, spend more money than they intended to	86%	5%	9%
The majority of people who gamble don't have any problems with their gambling	33%	24%	42%

Despite the high level of agreement that **everyone who gambles will, on occasion, spend more money than intended** (86%), it is the relationship with the second statement which is largely driving the identified factor. Response to the statement that **the majority of people who gamble don't have any problems with their gambling** is decidedly mixed in Nova Scotia. Only 11% of adults in the region are in strong agreement, with twice as many strongly disagreeing (22%). This suggests that only one-third are confident of their position on the issue, be it positive or negative.

Women (46% versus 39%) and those with the lowest annual household incomes (51% versus \$50,000+: 30%) report the highest levels of skepticism on the issue. Women are also less inclined to agree (26% versus 39%). Those in the highest income segments tend to be more neutral and, as a result, rates for agreement do not differ over income. There were no other notable differences among the regions for age.

There is a general agreement by the vast majority of adults that anyone who gambles is at risk for spending beyond their intended limit, at least on an occasional basis. However, this perception appears to be associated with

adults' beliefs about the proportion of gamblers who experience problems with their gaming. Not surprisingly, those who feel that the majority of gamblers do not experience problems, on average, report significantly lower estimates of the rate of problem gambling in Nova Scotia, as compared to those who disagree with the statement (22% versus 34%). However, this difference in and of itself is insufficient to explain the discrepancy in responses. While further analysis is required to fully identify the associations, the results suggest that problems with gambling and problem gambling are not necessarily synonymous for respondents. It may be considered completely normal for the majority of gamblers to experience difficulties on occasion with their gambling without reaching official status as a problem gambler. Thus, gambling may be viewed as risky behaviour for which some adults manage to **maintain** or **regain** control and others do not.

#### FACTOR 5 - Other

Table 15

	Agree	Neutral	Disagree
If the government banned VLTS's, then the players would simply spend the money on other gambling activities	58%	15%	27%
I have enough information on problem gambling to tell if someone in my household has a problem with gambling	65%	14%	21%

There were two statements which did not load on any other factor and were most strongly related to each other. The primary statement was **if the government banned VLT's, then the players would simply spend the money on other gambling activities**. Adults, in general, are inclined to agree with the statement (58%). Those with the lowest incomes (<\$25,000: 45%) and those living in Cape Breton County (46%) are most likely to

express **strong agreement**. In fact, presumably due to the greater role slot machines and other games of chance are perceived to play in problem gambling in Cape Breton County, residents in this region report the highest levels of concurrence (69% versus  $\approx 57\%$ ) with the belief that, in the absence of VLT's, players would shift their expenditures to other games of chance. Only those with the highest household incomes (\$50,000+) are significantly less likely to agree with such a scenario (49% versus  $\approx 62\%$ ).

Cape Breton County residents also express higher agreement that **they have enough information on problem gambling to tell if someone in their household has a problem with gambling** (74% versus 64%). Older adults (55 years +: 58%) and those living in higher income households (\$50,000+: 59%) appear to be least certain concerning identification of problem gambling in their households. This likely reflects the lower involvement levels both groups typically have in gaming activities in general.

Regardless, those who tend to respond under this particular factor may be best characterized as "Informed Cynics" who, presumably, because of their familiarity with the signs of problem gambling, could identify someone as having a problem in this area and, in the case of VLTS's anyway, believe banning of the machines would simply result in players diverting the same money to other gambling.

**In general, gambling is perceived to be a fairly risky pastime by the majority of adults in Nova Scotia. While almost half of adults agree that, for the most part, gambling and games of chance are fun and entertaining, only one-third believe that people who gamble do not encounter any difficulties with the activity. Conversely, the majority (86%) of Nova Scotians feel that everyone who gambles will, on occasion, spend more money than intended.**

**As a result, there are strong levels of agreement expressed for initiatives which are seen to exert controls on gambling, as well as for efforts which are designed to minimize or alleviate the problems**

associated with gambling.

There is almost complete consensus that people who do encounter difficulties with their gambling need easy access to assistance. In fact, 80% endorse government responsibility for offering programs to help Problem Gamblers and their families.

In terms of preventative action, adults generally agree (80%) that all individuals need to have more information on how to manage their gambling. Although the majority still agree, there is slightly lower support (68%) for the government assuming a more proactive role in promoting and educating people on how to gamble responsibly. Cape Breton County (60%) and those with the lowest annual household incomes (56%) are significantly more likely to strongly endorse government support in the education and promotion of responsible gaming and also tend to be those likely to strongly agree on the role of government in providing problem gambling programs (70% to 74%, respectively).

The use of gambling proceeds to generate funds for charities is viewed more favourably (62%) than as a method of generating government revenues (54%). Just over half of all adults acknowledge that gambling is a reasonably source of revenue and support for this approach declines with age and income.

Given the perception by the majority of adults (70%) that gambling takes advantage of those who can least afford to play, there is strong support for advertising restrictions, particularly to reduce the impact of gambling on children.

It is noteworthy that just over half of the adults (55%) in the province are prepared "to put their money where their mouth is" and would prefer to see VLT's reduced and/or eliminated, even if it resulted in higher taxes for them personally.



**Overall, it appears that problem gambling is still an issue which should remain on the agenda for the majority of adults (73%), with only 14% indicating that problem gambling is given too much attention in the province.**

## **KNOWLEDGE & INTEREST LEVELS FOR SPECIFIC ISSUES**

To assist NSAGA in planning for future research, or as input to other initiatives, all respondents participating in the 1999 survey were questioned to obtain current knowledge levels and interest levels for specific issues related to gambling in Nova Scotia. In discussion with NSAGA, there were ten key issues identified and examined. For each, all respondents were asked to indicate their general level of knowledgability, using a scale of not at all knowledgeable, somewhat knowledgeable and very knowledgeable. In addition, respondents were asked if such information were available, how interested would they be in having additional information on the topic; again using a scale of not at all interested, somewhat interested or very interested.

**Table 16****(Total Adults)**

	<b>Knowledgeable</b>			<b>Interest</b>		
	<b>Not At All</b>	<b>Som e- what</b>	<b>Very</b>	<b>Not At All</b>	<b>Som e- what</b>	<b>Very</b>
On how to play games of chance responsibly (responsible gaming)	43%	34%	23%	48%	34%	18%
Early warning signs that someone may be having problems with their gambling	41%	50%	9%	34%	39%	27%
The impact of problem gambling in Nova Scotia	43%	49%	8%	34%	41%	25%
Services available to help problem gamblers & their families	51%	44%	5%	36%	39%	25%
Odds of winning for the various games of chance available in the province	59%	33%	8%	45%	31%	24%
The amount of money generated by gambling in Nova Scotia	65%	30%	5%	32%	29%	39%
The impact of gambling for seniors in NS	68%	28%	5%	31%	38%	31%
The impact of gambling on children and youth in NS	68%	28%	4%	25%	35%	40%
On how the games of chance are operated & regulated in NS	70%	28%	2%	36%	36%	27%

How the money from gambling is used in NS	75%	19%	6%	19%	23%	58%
---	-----	-----	----	-----	-----	-----

In total, 40% of respondents report that they consider themselves to be very knowledgeable on at least one of the ten issues measured. Response towards “how to play games of chance responsibly” accounts for almost half (44%) of this result. In fact, high knowledge levels (i.e., very knowledgeable) for the remaining issues are noted collectively by 22% of the population, with no one issue garnering more than 9% for those Very Knowledgeable.

Respondents tend to believe they are at least somewhat more knowledgeable on **early warning signs of problem gambling (59%), the impact of problem gambling (57%), on how to play games of chance responsibly (57%), and services available to help problem gamblers and their families (49%).**

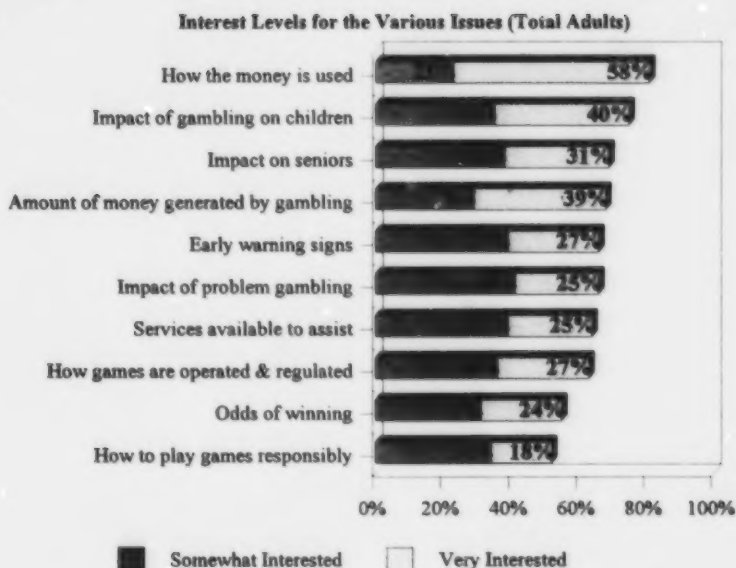
Knowledge levels are significantly lower for:

- how the money from gambling is used in Nova Scotia (25%);
- how games of chance are operated and regulated in Nova Scotia (30%);
- the impact of gambling for children (32%) and seniors (33%);
- the amount of money generated by gambling in Nova Scotia (35%);
- odds of winning for the various games of chance available (41%).

While 40% of respondents reported high<sup>4</sup> knowledge levels for at least one issue, almost twice as many adults (72%) indicated that they would be **very interested** in having access to additional information on at least one of these issues.

In general, younger adults (<35 years of age) are more inclined to report high levels of interest for additional information on measures and this tendency declines with age (19 - 34 years: 82%; 35 - 54 years: 72%; 55+ years: 60%). There was an exception noted for the impact of gambling on seniors, which elicits similar interest levels in all age segments. Household income is also related to general interest such that as income goes up, there is generally an increase in interest levels for additional information. There were no differences observed for gender or region, in terms of general

**Figure 43**



interest levels, except where noted in relation to specific issues.

Information on **how gambling proceeds are used** generates the greatest interest levels (81%), with over half (58%) of all adults expressing high interest in obtaining additional information on this topic.

The **impact of gambling on children and youth** elicits the next highest level of interest (75%). This is a significantly more important issue for those under 55 years of age ( $\approx 81\%$  versus  $59\%$ ) and for those in the higher income segments ( $\$50,000+$ :  $82\%$  versus  $\approx 70\%$ ).

The **impact of gambling for seniors** falls third in the issue rankings, with 69% of respondents at least somewhat interested. Interest in the **actual amounts of money generated by gambling in Nova Scotia** is almost

identical (68%) and, in fact, generates a higher proportion of those very interested (39% versus 31%). Interestingly, the response towards additional information on the amount of money provided by gambling tends to be fairly comparable across all the various demographic categories, with the exception of older adults. Those in Halifax County (37% versus ≈28%) and with higher household incomes (\$50,000+: 40% versus <\$25,000: 26%) are more likely to desire greater information on the implication of gambling for seniors.

There is a significant, positive relationship between knowledge levels and interest levels ( $r \approx .23$   $p < .000$ ) for the various gambling related issues, suggesting that those who are most informed on the issues are also more likely to desire more detailed information. However, this relationship only explains approximately 5% of the variance in the two measures. **Undoubtedly, there is a great deal of uncertainty about the impacts of gambling, in general, and problem gambling, in particular, which is reflected in the reported desire for more information.**

## ISSUE PRIORITIES FOR THOSE VERY INTERESTED

When only those who are Very Interested in additional information are considered, the information priorities are as follows.

**Table 17**

	<b><u>% of Those Very Interested</u></b>
How the money generated from gambling is used	80%
Impact of gambling on children	56%
Amount of money generated by gambling	55%
Impact of gambling for seniors	43%
How games of chance are operated and regulated	38%
Early warning signs of problem gambling	38%
Services available to assist problem gamblers	35%
Impact of problem gambling	35%
Odds of winning various games of chance	33%
How to play games of chance responsibly	25%

Compared to other adults, those *very interested* in obtaining additional information tend to differ on the following measures:

- less likely to be opposed to all or most forms of gaming (24% versus 40%);
- have higher approval of casinos (32% versus 23%), VLT's (19% versus 13%), bingos (61% versus 49%), charity raffles and draws (85% versus

---

**IMPORTANT NOTE CONCERNING THE FOLLOWING  
PAGES**

**THE PAGES WHICH FOLLOW HAVE BEEN FILMED  
TWICE IN ORDER TO OBTAIN THE BEST  
REPRODUCTIVE QUALITY**

**USERS SHOULD CONSULT ALL THE PAGES  
REPRODUCED ON THE FICHE IN ORDER TO OBTAIN  
A COMPLETE READING OF THE TEXT.**

---

**REMARQUE IMPORTANTE CONCERNANT LES  
PAGES QUI SUIVENT**

**LES PAGES SUIVANTES ONT ÉTÉ REPRODUITES EN  
DOUBLE AFIN D'AMÉLIORER LA QUALITÉ DE  
REPRODUCTION**

**LES UTILISATEURS DOIVENT CONSULTER TOUTES  
LES PAGES REPRODUITES SUR LA FICHE AFIN  
D'OBTENIR LA LECTURE DU TEXTE INTÉGRAL**

74%);

- more likely to strongly favour voluntary exclusion programs for VLT establishments (71% versus 59%);
- to disapprove of bill acceptors on VLT's (74% versus 57%);
- to be personally aware of a problem gambler (56% versus 33%);
- to have a problem gambler in their household (5% versus 2%);
- to have higher education levels (less than high school graduate: 21% versus 35%);
- to be under 35 years of age (37% versus 21%);
- to have an annual household income over \$50,000 (26% versus 17%).

It appears from this preliminary analysis that those most interested in obtaining additional information are also more likely to find the issue of gambling relevant to them. They are significantly more likely to engage in gaming activities on a regular basis, in particular \$2.00 Scratch 'n Wins (25% versus 12%), VLTS's (10% versus 4%) and sports betting/Proline (3% versus <1%). They also are more likely to report having other adults in their households who play games of chance for money, on either a casual (39% versus 27%) or regular (16% versus 8%) basis.

Currently, the adults who express high interest levels in obtaining additional information on gambling related issues believe, on average, 28% of adults in Nova Scotia are problem gamblers. Approval levels for regulated gambling activities in Nova Scotia are currently still comparatively more favourable for these adults. However, their interest in additional information in combination with their reported attitudes towards proposed changes makes this group susceptible to shifts in opinions and support.

**In summary, interest in having additional information available for the various gambling related issues measured was extremely high. In fact, 72% of adults indicated they were very interested in having access to additional information on at least one of the ten issues.**

**Current information priorities appear to be evenly divided among interest in the amount of money derived from gambling (68%) and**



how the money is actually used (81%) versus the impact of gambling for children (75%) and seniors (69%) across the province.

It is noteworthy that, while respondents indicated higher knowledge levels for the early warning signs of problem gambling, the impact of problem gambling and the services available to assist problem gamblers and their families, approximately two-thirds of adults would still like to have more information on these topics.

It should be noted that even for those issues generating the lowest interest rates, over half of adults are at least somewhat interested in being able to have access to additional information.

Additional analysis could examine responses in greater detail, in order to identify and assist in prioritizing information needs and to target specific groups or segments in the population. This analysis would also assist in communication strategies to ensure the information is being effectively disseminated.

## **METHODOLOGY**

### **Questionnaire Design**

The 1999 questionnaire was designed by senior researchers at *Focal Research Consultants Ltd.* in consultation with researchers/project management at the *Nova Scotia Alcohol & Gaming Authority*. Tracking measures from previous years were retained, and sections designed to address new and current issues related to gambling in Nova Scotia were incorporated.

The final survey evolved through five draft versions. Formal pretesting was undertaken on Draft I (August 11/99; n=16), Draft III (August 12/99; n=13) and Draft V (August 18/99; n=25). The final questionnaire length averaged 20 minutes (range of 10.2 to 69.3 minutes).

74%);

- more likely to strongly favour voluntary exclusion programs for VLT establishments (71% versus 59%);
- to disapprove of bill acceptors on VLT's (74% versus 57%);
- to be personally aware of a problem gambler (56% versus 33%);
- to have a problem gambler in their household (5% versus 2%);
- to have higher education levels (less than high school graduate: 21% versus 35%);
- to be under 35 years of age (37% versus 21%);
- to have an annual household income over \$50,000 (26% versus 17%).

It appears from this preliminary analysis that those most interested in obtaining additional information are also more likely to find the issue of gambling relevant to them. They are significantly more likely to engage in gaming activities on a regular basis, in particular \$2.00 Scratch 'n Wins (25% versus 12%), VLTS's (10% versus 4%) and sports betting/Proline (3% versus <1%). They also are more likely to report having other adults in their households who play games of chance for money, on either a casual (39% versus 27%) or regular (16% versus 8%) basis.

Currently, the adults who express high interest levels in obtaining additional information on gambling related issues believe, on average, 28% of adults in Nova Scotia are problem gamblers. Approval levels for regulated gambling activities in Nova Scotia are currently still comparatively more favourable for these adults. However, their interest in additional information in combination with their reported attitudes towards proposed changes makes this group susceptible to shifts in opinions and support.

**In summary, interest in having additional information available for the various gambling related issues measured was extremely high. In fact, 72% of adults indicated they were very interested in having access to additional information on at least one of the ten issues.**

**Current information priorities appear to be evenly divided among interest in the amount of money derived from gambling (68%) and**

how the money is actually used (81%) versus the impact of gambling for children (75%) and seniors (69%) across the province.

It is noteworthy that, while respondents indicated higher knowledge levels for the early warning signs of problem gambling, the impact of problem gambling and the services available to assist problem gamblers and their families, approximately two-thirds of adults would still like to have more information on these topics.

It should be noted that even for those issues generating the lowest interest rates, over half of adults are at least somewhat interested in being able to have access to additional information.

Additional analysis could examine responses in greater detail, in order to identify and assist in prioritizing information needs and to target specific groups or segments in the population. This analysis would also assist in communication strategies to ensure the information is being effectively disseminated.

## **METHODOLOGY**

### **Questionnaire Design**

The 1999 questionnaire was designed by senior researchers at *Focal Research Consultants Ltd.* in consultation with researchers/project management at the *Nova Scotia Alcohol & Gaming Authority*. Tracking measures from previous years were retained, and sections designed to address new and current issues related to gambling in Nova Scotia were incorporated.

The final survey evolved through five draft versions. Formal pretesting was undertaken on Draft I (August 11/99; n=16), Draft III (August 12/99; n=13) and Draft V (August 18/99; n=25). The final questionnaire length averaged 20 minutes (range of 10.2 to 69.3 minutes).

The questionnaire is divided into five sections:

#### Participation In Gambling Activities In Nova Scotia

- trial (ever played), frequency of play, average expenditure, average length of time spent playing, play in the last month for the various gambling activities available in Nova Scotia (including unregulated gambling)

#### Levels Of Opposition To Gambling

- opposition to gambling overall and individual types of gambling, approval of locating ABM's in different gambling establishments, approval of new practice concepts related to VLT's, evaluation of Voluntary Exclusion programs

#### Problem Gambling

- perceived prevalence of problem gambling in Nova Scotia, personal knowledge of problem gamblers, familiarity with/access of support services for problem gambling

#### Attitudes/knowledgability For Current Gambling-Related Issues

- attitudinal statements, knowledgability/interest in information on various gambling-related issues

#### Demographics

- age, marital status, education, household income, number of residents in household (adults versus children), presence of gamblers in the household, prevalence of children participating in gambling activities, gender, and area of residence.

#### Sampling

Focal Research employed a multi-stage, random sampling process to ensure a representative random selection of adults (aged 19+) in Nova Scotia for survey participation. To select the sampling frame, Focal used customized software from ASDE Inc. called *Canada Survey Sampler*. This software distinguishes between listed numbers (i.e., printed in telephone directories) and unlisted numbers (i.e., not in service, new

subscribers/missed publishing deadlines, and numbers for households who chosen to have their number unlisted) to generate the sampling frame.

In order to control for self-selection bias and over-representation of single-adult households, and to ensure that men and women were accurately represented on the sample, two independent samples were drawn: one for men and one for women. A total of 600 surveys were to be completed, half with men (n=300) and half with women (n=300). This technique also eliminated the potential necessity of incorporating gender when weighting the final results.

Gender	Population (19 years+)†	Sample Size	Margin Of Error (95% C.L.)
Male	≈329,500	300	±5.7%
Female	≈354,400	300	±5.7%
TOTAL	≈683,900	600	±4.0%

† Source: 1999 estimates, FP Markets Canadian Demographics, Financial Post

The primary drawback of this sampling technique is under-representation of younger adults (i.e., aged 19 to 24). These younger adults are more likely to live in multi-adult households (and, therefore, less likely to be selected for participation should there be more than one qualified individual in the household), and are also more likely to have new phone numbers (students, more transient than older adults).

### **Weighting**

Evidence of the above sampling drawback was noted in the distribution of respondents across age categories. Adults aged 19 to 24 years were under-represented, with a skew towards those between 35 and 64 years of age. In order to achieve total provincial data representative of the population, the data was, therefore, weighted by age as follows:

Age Category	Population† (19 years+)	Unweighted Sample	Weight
19-24 years	11%	4%	2.77
25-34 years	21%	19%	1.11
35-44 years	22%	25%	0.87
45-54 years	18%	25%	0.69
55-64 years	12%	13%	0.91
65+	17%	15%	1.11

† Source: Statistics Canada - 1996 Census estimates

The following table compares demographic characteristics of both the unweighted and weighted sample with projections for the Nova Scotian adult population (Statistics Canada 1996 Census):

Demographics	Population† (19 years+)	Unweighted Sample	Weighted Sample
<b>AGE CATEGORY:</b>			
19-24 years	11%	4%	11%
25-34 years	21%	19%	21%
35-44 years	22%	25%	22%
45-54 years	18%	25%	18%
55-64 years	12%	13%	12%
65+	17%	15%	17%
<b>GENDER:</b>			
Male	48%	50%	49%
Female	52%	50%	51%

Demographics	Population† (19 years+)	Unweighted Sample	Weighted Sample
Single/Never married	26%	15%	21%
Married/Living with partner	59%	73%	67%
Separated	3%	2%	2%
Divorced	5%	5%	4%
Widowed	7%	5%	5%

### **Data Collection**

The data was collected from August 18<sup>th</sup> to September 3<sup>rd</sup>, 1999. Data collection was fully supervised and conducted from Focal Research Consultants' centralized data collection facility in Halifax, Nova Scotia. Each survey was 100% edited for accuracy and completeness. Random quality control checks (participant re-contacts by supervisory staff) were conducted with 10% to 15% of each interviewer's surveys. Response rates were maximized by controlling the release of phone numbers to the interviewers and requiring unlimited callbacks to be made on the numbers released, over various days of the week and times of day.

Data entry occurred concurrently with data collection to maximize turn-around and allow for preliminary data checks/reviews. A minimum 15% manual quality control check was performed on the entered surveys. In addition, the data was submitted to customized data cleaning programs which incorporate logic checks, as well as out of range value checks. The data was entered on a proprietary data entry program customized for this study using SYSTAT. The data was then exported and labeled using SPSS version 9.0.

## Completion Results

The following project call disposition report uses PMRS's Standard Record of Contact for telephone studies. The response rate for this study is 67%, with a refusal rate of 24% (calculations below). Thus, results are considered representative and generalizable to the population at large.

<b>Invalid Sample</b>	Not In Service	192
	Ineligible	66
	<b>Total</b>	<b>258</b>
<b>Non-Contacts</b>	No Answer After 7+ Attempts	51
	Respondent Not Available	75
	Busy	3
	Illness/Language Barrier	25
	<b>Total</b>	<b>154</b>
<b>Refusals</b>	Household	101
	Known Qualified	179
	<b>Total</b>	<b>280</b>
<b>Co-operative Contacts</b>		
	Disqualified	282
	Completed Interviews	600
	<b>Total</b>	<b>882</b>

**Total Unique Numbers Attempted** =  $258 + 154 + 280 + 282 + 600 = 1,574$

**Total Eligible Numbers** = Total Unique Numbers Attempted - Invalid Sample =  $1,574 - 258 = 1,316$

**Total Asked** = Refusals + Disqualified + Completed Surveys  
=  $280 + 600 + 282 = 1,162$

**Response Rate** =  $\text{Co-operative Contacts} \div \text{Total Eligible Numbers} = 882 \div 1,316 = 67\%$

**Refusal Rate** =  $\text{Refusals} \div \text{Total Asked} = 280 \div 1,162 = 24\%$



Respondent ID #: \_\_\_\_\_

Interviewer ID #: \_\_\_\_\_

Hello, my name is \_\_\_\_\_ from Focal Research, a professional research firm located in Halifax. We are conducting a province-wide survey with WOMEN about participation and opinions toward gambling in Nova Scotia. Your household has been randomly selected to represent opinions of WOMEN in the province. May I please speak to a FEMALE who is 19 years of age or older and is a member of this household?

**IF NO FEMALES IN HOUSEHOLD - THANK & TERMINATE**

**IF NOT AVAILABLE - Is there a good time I can call back to reach the correct person? Whom should I ask for? (WRITE ON RECORD OF CALLS SHEET)**

We would like to assure you that your answers are anonymous and confidential, and the information gathered is used for research purposes only. The survey will take approximately 10 to 15 minutes and your contribution to our research will be greatly appreciated. Is this a convenient time for you to take part?

**IF 4 or more for Any Gambling Activity in Q # 1b or Q # 2b**

**Then Code Regular Gambler**

**IF 0 to all in Q # 1b or Q # 2b then Code Non-Gambler**

**Everyone else Code Casual Gambler**

Regular Gambler	2	
Casual Gambler	1	_____
Non-Gambler	0	

- 1a. Have you ever purchased or played any of the following games of chance for which you can win money? First of all... **(RECORD BELOW)**
- 1b. **IF EVER PLAYED THEN ASK:** During the last year, on average, how often did you purchase or play \_\_\_\_\_? **(READ LIST BELOW FOR EACH GAME EVER PLAYED)**

- 1c. **IF Q # 1B > 0 THEN SPECIFY:** On average, approximately how many times (per week, per month, or in the last year) did you play/purchase \_\_\_\_\_?

**List & Codes For Q # 1B:**

Weekly (once a week or more)  
 Monthly (once a month or more)  
 Occasionally (sporadic, less often than once a month)  
 Rarely (only once or twice)  
 Seasonal/Varies due to time of year

**Q # 1C:**

5 - Specify # Times Per Week  
 4 - Specify # Times Per Month  
 3 -  
 2 - Specify # Times Per Year  
 1 -  
 0

OR DID NOT PLAY IN LAST YEAR

- 1d. **IF Q # 1C > 0 THEN ASK:** On average, how much did you spend, out of pocket (i.e., excluding any winnings) each time you played \_\_\_\_\_? **(ROUND TO NEAREST DOLLAR)**

- 1e. **IF Q # 1C > 0 THEN ASK:** On average, how much time did you spend each time you played \_\_\_\_\_? **(CONVERT TO NEAREST MINUTE)**

- 1f. **IF Q # 1C > 0 THEN ASK:** In the last month, how many times did you purchase or play \_\_\_\_\_?

		Q 1a) Ever Played	Q 1b) Frequency of Play	Q 1c) # Times Played Per Wk/Mo/Yr	Q 1d) Avg. Expenditur e Per Time	Q 1e) Avg. Length of Time Spent Per Time	Q 1f) # Times Played In Last Month
Lottery Draws such as 6/49, Super 7, TAG	1	—	— (code 0-5)	— times	\$ —	N/A	— times
\$2.00 Scratch 'n Win lottery tickets	2	—	— (code 0-5)	— times	\$ —	N/A	— times
\$1.00 Scratch 'n Win lottery tickets	3	—	— (code 0-5)	— times	\$ —	N/A	— times
30¢ Break open/Pull-tab tickets	4	—	— (code 0-5)	— times	\$ —	N/A	— times
Sport Select Promise	5	—	— (code 0-5)	— times	\$ —	N/A	— times
Bingo in Bingo Halls (excluding Lotto Bingo)	6	—	— (code 0-5)	— times	\$ —	mins.	— times
Slot machines at the Halifax Casino	7	—	— (code 0-5)	— times	\$ —	mins.	— times
Non-slot or Table Games at the Halifax Casino	8	—	— (code 0-5)	— times	\$ —	mins.	— times
Slot Machines at the Sydney Casino	9	—	— (code 0-5)	— times	\$ —	mins.	— times
Non-slot or Table Games at the Sydney Casino	10	—	— (code 0-5)	— times	\$ —	mins.	— times
Video Lottery Terminals	11	—	— (code 0-5)	— times	\$ —	mins.	— times

- 2a. Now, have you ever played any of the following specific games of chance for which you can win money? **(READ LIST)**
- 2b. **IF EVER PLAYED THEN ASK:** Approximately how often in the last year did you purchase or play \_\_\_\_\_? **(READ LIST BELOW FOR EACH GAME EVER PLAYED)**
- |   |   |
|---|---|
| Weekly (once a week or more)                          | 5 |
| Monthly (once a month or more)                        | 4 |
| Occasionally (sporadic, less often than once a month) | 3 |
| Rarely (only once or twice)                           | 2 |
| Seasonal/Varies due to time of year                   | 1 |
| OR DID NOT PLAY IN LAST YEAR                          | 0 |
- 2c. **IF PLAYED IN LAST YEAR THEN ASK:** In the last month, approximately how much did you spend, out of pocket (i.e., excluding any winnings) playing \_\_\_\_\_? **(ROUND TO NEAREST DOLLAR)**

		Q 2a) Ever Played	Q 2b) Frequency Of Play In Last Year	Q 2c) Amount Spent In Last Month
Sports Bets/Pools (Excluding Sport Select Proline)	12	_____	_____	\$ _____
Horse Racing	13	_____	_____	\$ _____
Card Games for Money (not at casino)	14	_____	_____	\$ _____
Charity/Non-ALC Draws/Raffles	15	_____	_____	\$ _____
Internet Gambling	16	_____	_____	\$ _____
Satellite/TV Bingo	17	_____	_____	\$ _____
Any Other Types Of Betting	18	_____	_____	\$ _____

### LEVELS OF OPPOSITION TO GAMBLING

I would now like to ask you a few questions regarding your personal opinions about gambling. There are no right or wrong answers. We are simply interested in what you think.

**[READ]** For this survey, we are defining gambling as "Betting or wagering money on any activity that has an outcome that involves chance." These would include playing at the casino, playing video lottery machines, purchasing lottery tickets, playing bingo, betting on horses, charity draws, and playing cards for money. You may or may not agree with this definition, but please try to keep it in mind as you answer the questions.

3. Which of the following best describes your position on the various gambling activities currently available in Nova Scotia? Would you say that you are... **(READ LIST)**
- |   |   |
|---|---|
| Opposed to all forms of gambling                | 1 |
| Opposed to most forms of gambling               | 2 |
| Opposed to some, but not most forms of gambling | 3 |
| Not opposed to any form of gambling             | 4 |
| (Don't Know/Unsure)                             | 9 |

4. How much do you approve or disapprove of the following gambling activities being available in Nova Scotia? Do you strongly approve, approve, disapprove, strongly disapprove or do you not have an opinion about \_\_\_\_\_ being available in Nova Scotia? (ROTATE LIST)

	<u>Strongly Disapprove</u>	<u>Disapprove</u>	<u>No Opinion</u>	<u>Approve</u>	<u>Strongly Approve</u>	
( ) Casinos	1	2	3	4	5	_____
( ) Video lottery machines	1	2	3	4	5	_____
( ) Lottery tickets	1	2	3	4	5	_____
( ) Bingos	1	2	3	4	5	_____
( ) Charity/Non-ALC Lotteries	1	2	3	4	5	_____

- 5a. Have you ever heard of a program available at the casinos in Nova Scotia called *Voluntary Exclusion*?

YES 1 - CONTINUE  
 NO 0 - GO TO Q # 5c  
 (Don't know/Unsure) 9 - GO TO Q # 5c

- 5b. IF YES: As far as you know, what is the Voluntary Exclusion process? (REFER TO DEFINITION BELOW - Q # 5c)

Correct 2  
 Partially Correct 1  
 Incorrect 0  
 (Don't know/Unsure) 9

- 5c. Voluntary Exclusion allows a person to formally seek assistance in staying out of the casinos. The person voluntarily signs a form that indicates they do not want to be allowed in the casino. This voluntarily bans them from attending the two provincial casinos for an indefinite period of time. The casino keeps a picture of the person on file and if the casino staff identifies the person, they immediately remove them by escorting them off the casino premises.

Now have you ever heard of this program?  
 (Is this the program you are familiar with?)

YES 1  
 NO 0  
 (Don't know/Unsure) 9

- 5d. Using a scale of 1 to 5 where 1 means Strongly Opposed and 5 means Strongly In Favour, at this time, what is your opinion towards having this Voluntary Exclusion Program available in the Nova Scotia casinos?

Strongly  
Opposed  
1

2

3

4

Strongly In  
Favour  
5

\_\_\_\_\_

6. Again using a scale of 1 to 5 where 1 means Strongly Opposed and 5 means Strongly In Favour, at this time, what is your opinion towards having Voluntary Exclusion Programs introduced for... (ROTATE ORDER)

	<u>Strongly Opposed</u>				<u>Strongly In Favour</u>	
( ) Establishments which have video lottery machines	1	2	3	4	5	_____
( ) Bingos	1	2	3	4	5	_____

7. Using a scale of 1 to 5 where 1 means Strongly Disapprove and 5 means Strongly Approve, at this time, how much do you approve or disapprove of each of the following practices? First of all...

	<u>Strongly Disapprove</u>				<u>Strongly Approve</u>	
Having Automated Bank Machines located in:						
Casinos	1	2	3	4	5	_____
Video Lottery Terminal Sites	1	2	3	4	5	_____
Bingo Halls/Locations	1	2	3	4	5	_____
Having Video Lottery Machines in Nova Scotia accept both bills and coins, rather than just coins	1	2	3	4	5	_____

In order to play video lottery games, you would need a player card which you have to swipe on the VLT before you can play. The card would let each player track their time and money spent, and would also allow for tracking of video lottery play in the province.	1	2	3	4	5	_____
--	---	---	---	---	---	-------

## PROBLEM GAMBLING

- 8a. Do you know what percentage of Nova Scotian adults are considered to be problem gamblers?

YES 1 - CONTINUE  
 NO 0 - GO TO Q # 8c  
 Don't know/Unsure 9 - GO TO Q # 8c

- 8b. What percentage of Nova Scotian adults are considered to be problem gamblers?

\_\_\_\_\_ - GO TO Q # 10

- 8c. What percentage of all adults in Nova Scotia do you think are problem gamblers?

10. Are you aware of any assistance or services currently in place to help... \_\_\_\_\_

	<u>YES</u>	<u>NO</u>	<u>DK</u>	
a) Problem Gamblers	1	0	9	- IF NO OR DK TO
b) Families of Problem Gamblers	1	0	9	BOTH - GO TO Q # 9a

11. What support services are available to assist problem gamblers or their families? (USE CODING FROM Q # 12c NEXT PAGE)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

12. Including yourself, do you personally know of anyone in Nova Scotia who has, or has had, a problem with their gambling?

YES	1 - CONTINUE	_____
NO	0 - GO TO Q # 12b	_____
(Don't know/Unsure)	9 - GO TO Q # 12b	_____

- 9b. IF YES: Which of the following best describes your relationship to this person or these people you know who have a gambling problem? (READ LIST) (MORE THAN ONE RESPONSE ALLOWED)

- 9c. FOR EACH MENTION: How many are problem gamblers?

	9b)	9c)
Self	1 _____	_____
Household Family Member	2 _____	_____
Household Non-Family Member	3 _____	_____
Immediate Family - Not In Household (brother, sister, parents, grandparents)	4 _____	_____
Other Family - Not In Household (uncle, aunt, cousin)	5 _____	_____
Others - Non-Household, Non-Family Member (friend, acquaintance, co-workers)	6 _____	_____

- 9d. What type(s) of gambling do or did they have a problem with?

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- 12a. Have you ever sought any assistance or information, from informal sources such as friends/family members or more formal services, to help either yourself or someone else with a gambling problem?
- 12b. Has anyone else in your household ever sought any assistance or information to help either themselves or someone else with a gambling problem?

	A)	b)	
YES – help self/themselves	1	1	a) ____
YES – help someone else	2	2	
YES – both self & someone else	3	3	b) ____
NO	0	0	

**IF NO TO BOTH  
GO TO Q # 13**

- 12c. **IF YES TO ANY OF THE ABOVE:** What sources were accessed in order to get assistance or information for problem gambling? **(READ LIST)**

Spouse/Partner	1 ____
Other Family Members, Household	2 ____
Employer/Colleagues	3 ____
Friends	4 ____
Church/Religious Groups	5 ____
Family Doctor, Therapist	6 ____
Gamblers Anonymous	7 ____
Other Gambling Self-Help Groups/Community Centres	8 ____
Drug Dependency Services/Detox	9 ____
Gambling Helpline – 1-800 #	10 ____
Community Counsellors	11 ____
Other _____	12 ____
Don't Know	99 ____

13. I am going to read you a series of statements, and I'd like you to tell me how much you agree or disagree with each one. Again, there are no right or wrong answers, we are only looking for your opinions. Using a scale of 1 to 5 where 1 means you Strongly Disagree and 5 means you Strongly Agree, how much do you agree or disagree with each of the following statements: (ROTATE ORDER)

		Strongly Disagree					Strongly Agree	
		1	2	3	4	5		_____
( )	1.							
	2.							
	3.							
( )	4.							
	5.							
	6.							
	7.							
	8.							
	9.							
( )	10.							
	11.							
	12.							
	13.							
	14.							
( )	15.							



**Q # 13 Continued**

		Strongly Disagree	1	2	3	4	5	Strongly Agree	
	16. I have enough information on problem gambling to tell if someone in my household has a problem with gambling								
	17. If the government banned VLTs, then the players would simply spend the money on other gambling activities	1	2	3	4	5			
( )	18. The majority of people who gamble don't have any problems with their gambling	1	2	3	4	5			
	19. People who encounter problems with their gambling need to have help readily and easily available to them	1	2	3	4	5			

14a How knowledgeable do you feel you are on the following. Would you say you are very knowledgeable, somewhat knowledgeable or not at all knowledgeable about... (ROTATE LIST)

14b. If such information were available, how interested would you be in having additional information on...

		a) Knowledgeable				b) Interested			
		Not At All	Some-what	Very		Not At All	Some-what	Very	
( )	1. The impact of problem gambling in Nova Scotia	1	2	3	—	1	2	3	—
( )	2. Odds of winning for the various games of chance available in the province	1	2	3	—	1	2	3	—
( )	3. Services available to help problem gamblers and their families	1	2	3	—	1	2	3	—
( )	4. Early warning signs that someone may be having problems with their gambling	1	2	3	—	1	2	3	—
( )	5. The amount of money generated by gambling in Nova Scotia	1	2	3	—	1	2	3	—
( )	6. How the money from gambling is used in Nova Scotia	1	2	3	—	1	2	3	—
( )	7. The impact of gambling on children and youth in Nova Scotia	1	2	3	—	1	2	3	—
( )	8. The impact of gambling for Seniors in Nova Scotia	1	2	3	—	1	2	3	—
( )	9. On how games of chance are operated and regulated in Nova Scotia	1	2	3	—	1	2	3	—
( )	10. On how to play games of chance responsibly (responsible gaming)	1	2	3	—	1	2	3	—

## DEMOGRAPHICS

**[READ]** We are nearly finished the survey. I just need to know a little bit about yourself so that we can compare different groups of people.

**14. What is your current marital status? (READ IF NECESSARY)**

Never been married	1
Married / Living with partner	2
Separated	3
Divorced	4
Widowed	5
(No Answer/Refused)	8
(Don't Know)	9

**15. What is the highest level of education you have had the opportunity to complete?**

No formal schooling	1
Elementary to some high school (grades 1-11)	2
Graduated high school	3
Some community college / trade school	4
Completed community college / trade school	5
Some university	6
Completed university (Bachelor's, Diploma)	7
Post graduate (Master's, Ph.D.)	8
(No answer/Refused)	88
(Don't know)	99

**16. In what year were you born?**

**17a. Which of the following broad income categories best describes your total household income before taxes in 1998? Would it be:**

Up to \$15,000	1
Between \$15,001 and \$25,000	2
Between \$25,001 and \$50,000	3
Between \$50,001 and \$70,000	4
More than \$70,000	5
(Refused)	8
(Don't know)	9

**17b. How many people contribute to this household income?**

**18a. Including yourself, how many people live in your household?**

**(IF ONE - GO TO Q # 19)**

- 18b. Excluding yourself, how many adults in your household, 19 years of age or older, play any games of chance for money either...

Occasionally  
once every few months or so

OR

On a regular basis  
of once a month or more

(TOTAL MUST BE LESS THAN Q # 18a)

- 18c. How many children in your household are under 19 years of age?

(IF ZERO - GO TO Q # 19)

- 18d. To the best of your knowledge, have any of these children under 19 years of age ever participated in any of the following gaming activities played for money?

	YES	NO	D/K	
Lottery tickets	1	0	9	_____
Bingo in Bingo Halls	1	0	9	_____
Card Games	1	0	9	_____
Other games/gambling	1	0	9	_____

19. What are the first three digits of your postal code?

\_\_\_\_\_

20. What county do you live in?

\_\_\_\_\_

21. INTERVIEWER ONLY:

Male 1  
Female 2

On behalf of Focal Research, we would like to thank you for your contribution to our research. You may receive a quality control check. My supervisor calls back 10% of all my completed surveys to ensure you were comfortable participating in our study and that I was doing my job properly. May I please confirm your telephone number?

Telephone #: \_\_\_\_\_ Interviewer: \_\_\_\_\_

Date: \_\_\_\_\_ Supervisor: \_\_\_\_\_

Data Entry: \_\_\_\_\_ QCC: \_\_\_\_\_



Player Category

	Region		Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35-54 years of age	5 years or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/ Don't Know	Total
Non-Gambler	6%	3%	8%	5%	4%	6%	11%	8%	5%	6%	10%	7%
Casual Gambler	38%	36%	30%	45%	38%	34%	44%	36%	35%	41%	45%	38%
Regular Gambler	56%	61%	61%	49%	58%	60%	45%	55%	61%	53%	44%	55%
Sample Size	179	83	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Ever Played...

	Region			Gender		Age Category			Income Category			
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know
Draws	85%	84%	82%	83%	85%	82%	87%	82%	87%	88%	81%	73%
\$2 Instantants	50%	64%	64%	50%	69%	78%	53%	48%	66%	63%	51%	51%
\$1 Instantants	33%	52%	38%	32%	44%	51%	36%	27%	38%	41%	38%	32%
Breakopens	21%	27%	31%	21%	33%	41%	22%	19%	36%	28%	20%	22%
Proline	12%	4%	7%	15%	2%	16%	7%	1%	2%	12%	13%	4%
Bingo	33%	31%	39%	24%	48%	46%	29%	35%	46%	34%	26%	39%
Slots in Halifax	57%	12%	34%	34%	42%	54%	35%	24%	25%	39%	54%	38%
Table Games in Halifax	19%	1%	7%	14%	7%	20%	7%	2%	6%	12%	12%	9%
Slots in Sydney	6%	65%	7%	13%	15%	15%	16%	11%	15%	12%	18%	14%
Table Games in Sydney	3%	6%	1%	3%	1%	4%	1%	1%	2%	3%	2%	0%
VLT's	35%	29%	28%	33%	26%	50%	27%	8%	32%	31%	28%	29%
Sports Beta	18%	13%	10%	16%	10%	15%	15%	7%	5%	12%	23%	15%
Horse Racing	9%	9%	10%	11%	8%	5%	14%	9%	5%	10%	16%	10%
Card Games	33%	21%	25%	29%	25%	40%	23%	18%	25%	26%	32%	27%
Charity	75%	67%	68%	66%	74%	70%	72%	67%	60%	73%	82%	62%
Internet Gambling	2%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
Satellite/TV Bingo	5%	2%	8%	2%	11%	13%	4%	3%	14%	3%	2%	5%
Other Betting	2%	0%	1%	1%	1%	2%	1%	1%	1%	2%	1%	0%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Frequency Of Playing...

	Region		Gender		Age Category			Income Category			
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know
Overall...	22%	12%	23%	24%	26%	19%	27%	24%	17%	26%	30%
Did Not Play Last Year	0%	0%	0%	1%	1%	0%	1%	1%	0%	1%	0%
Seasonal/Varies	15%	13%	13%	15%	17%	13%	11%	12%	18%	14%	5%
Rarely	17%	27%	14%	28%	21%	19%	25%	23%	20%	19%	21%
Occasionally	19%	16%	20%	12%	18%	19%	11%	20%	17%	14%	9%
Monthly	26%	32%	30%	20%	18%	31%	25%	20%	29%	26%	25%
Weekly	53%	41%	57%	35%	25%	20%	59%	38%	43%	56%	54%
Did Not Play Last Year	1%	0%	1%	2%	2%	2%	1%	1%	1%	4%	0%
Seasonal/Varies	8%	13%	7%	13%	9%	13%	8%	13%	10%	8%	10%
Rarely	18%	24%	16%	20%	25%	18%	22%	21%	22%	19%	23%
Occasionally	13%	14%	11%	17%	26%	10%	7%	16%	18%	8%	9%
Monthly	6%	8%	7%	7%	12%	5%	3%	12%	6%	4%	4%
Weekly	73%	55%	77%	63%	59%	72%	80%	69%	70%	87%	75%
Did Not Play Last Year	1%	0%	1%	1%	1%	1%	1%	2%	1%	1%	0%
Seasonal/Varies	10%	11%	7%	13%	15%	10%	5%	7%	13%	10%	9%
Rarely	12%	18%	9%	16%	14%	13%	11%	14%	10%	14%	14%
Occasionally	4%	13%	5%	5%	10%	4%	3%	6%	4%	8%	2%
Monthly	1%	2%	1%	1%	2%	1%	1%	2%	1%	0%	1%
Weekly	87%	79%	86%	76%	67%	85%	90%	74%	81%	87%	84%
Did Not Play Last Year	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	2%
Seasonal/Varies	5%	7%	4%	10%	12%	6%	2%	7%	9%	4%	7%
Rarely	5%	8%	3%	9%	10%	4%	5%	10%	5%	3%	9%
Occasionally	1%	5%	2%	4%	5%	3%	1%	4%	3%	3%	1%
Monthly	3%	1%	4%	1%	5%	2%	1%	4%	3%	3%	0%
Weekly	90%	98%	89%	99%	90%	95%	99%	90%	93%	90%	96%
Did Not Play Last Year	5%	0%	2%	1%	3%	4%	1%	1%	3%	5%	1%
Seasonal/Varies	2%	1%	2%	0%	3%	0%	0%	1%	0%	2%	3%
Rarely	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Occasionally	2%	0%	1%	0%	2%	1%	0%	0%	1%	2%	0%
Monthly	2%	1%	2%	0%	3%	1%	0%	0%	3%	0%	1%
Weekly	17%	83	300	300	134	307	159	160	216	152	72
Sample Size	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total Percent											

Sample	Region		Gender		Age Category				Income Category			Total
	Halifax County	Cape Breton County	Male	Female	18-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	
Bingo	86%	86%	84%	79%	77%	81%	91%	84%	87%	92%	78%	86%
	Did Not Play Last Year											
	Seasonal/Varies	0%	0%	1%	1%	0%	0%	0%	0%	1%	0%	0%
	Rarely	8%	4%	8%	11%	5%	4%	7%	8%	4%	15%	7%
Slots in Halifax	3%	0%	1%	4%	5%	2%	2%	4%	2%	1%	4%	3%
	Occasionally	1%	1%	2%	1%	1%	1%	2%	1%	1%	2%	1%
	Monthly	2%	1%	3%	2%	1%	2%	4%	1%	2%	1%	2%
	Weekly	63%	77%	73%	64%	78%	87%	87%	78%	63%	74%	76%
Table Games in Halifax	3%	1%	2%	3%	3%	3%	1%	3%	1%	6%	0%	3%
	Did Not Play Last Year											
	Seasonal/Varies	25%	15%	18%	27%	15%	9%	9%	18%	25%	0%	17%
	Rarely	8%	3%	3%	0%	3%	2%	1%	4%	6%	7%	4%
Table Games in Sydney	1%	0%	1%	1%	0%	1%	2%	0%	1%	1%	0%	1%
	Occasionally	86%	88%	86%	83%	85%	80%	87%	90%	86%	92%	92%
	Monthly	2%	0%	1%	1%	1%	1%	0%	1%	1%	0%	1%
	Weekly	8%	1%	8%	10%	4%	1%	2%	7%	7%	4%	5%
Slots in Sydney	4%	0%	3%	2%	6%	1%	0%	2%	2%	3%	4%	2%
	Did Not Play Last Year											
	Seasonal/Varies	95%	87%	91%	90%	90%	93%	93%	93%	86%	92%	91%
	Rarely	1%	0%	0%	0%	1%	1%	0%	0%	2%	0%	0%
Table Games in Sydney	2%	20%	8%	8%	7%	8%	4%	6%	3%	10%	7%	6%
	Occasionally	7%	1%	2%	3%	3%	0%	0%	4%	2%	1%	2%
	Monthly	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
	Weekly	0%	5%	1%	1%	0%	1%	1%	1%	1%	0%	1%
VLTs	98%	95%	97%	98%	96%	98%	98%	98%	98%	98%	100%	98%
	Did Not Play Last Year											
	Seasonal/Varies	1%	4%	2%	0%	2%	1%	1%	0%	2%	0%	1%
	Rarely	2%	1%	1%	0%	2%	0%	0%	2%	0%	0%	1%
Sample Size Total Percent	79%	70%	73%	84%	85%	81%	94%	78%	82%	79%	79%	80%
	Occasionally	1%	0%	1%	1%	1%	1%	0%	1%	1%	0%	0%
	Monthly	9%	10%	7%	8%	7%	7%	11%	3%	9%	9%	8%
	Weekly	2%	4%	5%	5%	5%	5%	2%	5%	4%	6%	4%
Sample Size Total Percent	6%	5%	7%	3%	9%	5%	2%	6%	5%	4%	5%	5%
	Occasionally	3%	3%	5%	1%	7%	3%	0%	4%	3%	0%	3%
	Monthly	83	339	300	300	134	307	160	216	152	72	800
	Weekly	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



	Region		Gender		Age Category		Income Category			Refused/ Don't Know	Total			
	Halifax County	Cape Breton County	Other County		Male	Female	18-34 years of age	35-54 years of age	55 years of age or older			Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000
Sports Betting	Did Not Play Last Year	88%	91%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
	Seasonal/Variety	4%	7%	1%	4%	2%	4%	4%	1%	1%	3%	5%	3%	3%
	Rarely	5%	1%	1%	4%	1%	0%	2%	0%	0%	1%	7%	4%	2%
	Occasionally	0%	0%	1%	1%	0%	0%	1%	0%	0%	0%	2%	0%	1%
	Monthly	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Horse Racing	Did Not Play Last Year	88%	87%	87%	88%	88%	88%	88%	88%	87%	88%	88%	88%	87%
	Seasonal/Variety	0%	1%	0%	1%	0%	0%	1%	1%	0%	0%	2%	0%	1%
	Rarely	2%	0%	1%	2%	1%	2%	1%	1%	1%	1%	1%	2%	1%
	Occasionally	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
	Monthly	0%	0%	0%	1%	0%	0%	0%	1%	0%	1%	1%	0%	0%
Card Games	Did Not Play Last Year	70%	80%	88%	83%	84%	88%	88%	86%	88%	83%	81%	83%	83%
	Seasonal/Variety	3%	1%	1%	1%	2%	3%	2%	0%	3%	1%	3%	0%	2%
	Rarely	7%	3%	0%	3%	8%	11%	3%	2%	4%	0%	8%	8%	8%
	Occasionally	0%	3%	1%	3%	3%	4%	3%	2%	3%	3%	3%	4%	3%
	Monthly	0%	1%	4%	0%	2%	0%	2%	2%	2%	2%	7%	5%	4%
Charity	Did Not Play Last Year	33%	38%	38%	41%	32%	38%	32%	42%	40%	33%	21%	48%	38%
	Seasonal/Variety	0%	4%	5%	4%	7%	7%	6%	2%	3%	8%	6%	7%	5%
	Rarely	31%	19%	28%	25%	28%	28%	23%	31%	28%	27%	22%	28%	28%
	Occasionally	23%	24%	24%	20%	27%	23%	28%	17%	17%	24%	33%	18%	24%
	Monthly	13%	7%	8%	3%	4%	4%	11%	6%	7%	7%	13%	1%	7%
Internet Gambling	Did Not Play Last Year	98%	100%	100%	100%	99%	98%	98%	100%	100%	100%	100%	98%	100%
	Seasonal/Variety	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%
	Rarely	2%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
	Occasionally	87%	89%	83%	88%	81%	90%	86%	88%	80%	87%	88%	85%	85%
	Monthly	0%	0%	1%	0%	1%	1%	0%	0%	1%	1%	1%	0%	0%
Sawdust/TV Bingo	Did Not Play Last Year	1%	2%	2%	0%	3%	2%	2%	1%	3%	2%	0%	2%	2%
	Seasonal/Variety	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Rarely	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Occasionally	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Monthly	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Betting	Did Not Play Last Year	98%	100%	98%	99%	100%	98%	98%	100%	98%	100%	98%	100%	98%
	Seasonal/Variety	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Rarely	1%	0%	0%	1%	0%	1%	0%	0%	1%	0%	1%	0%	0%
	Occasionally	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Monthly	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sample Size	179	83	338	300	300	300	334	307	158	180	218	152	72	880
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Mean/Median Times Played Last Year For Those Who Played in Last Year

	Region			Gender		Age Category			Income Category				Total Percent	
	Halifax County	Cape Breton County	Other County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000			
											Refused/Don't Know			
Draws	Mean	32.3	32.3	29.5	37.6	24.4	23.2	38.0	28.7	26.0	33.4	31.5	34.0	30.8
\$2 Instants	Median	12	12	8	12	6	6	12	8	7	12	12	10	12
	Mean	40.3	19.3	22.9	34.5	21.5	38.0	16.6	22.4	33.0	25.5	26.3	14.5	26.9
\$1 Instants	Median	10	6	5	6	6	12	5	4	10	6	5	5	6
	Mean	6.8	16.2	12.7	15.1	9.5	16.5	7.3	9.9	21.7	6.3	10.7	7.2	11.8
Breakopens	Median	3	4	3	2	3	3	3	3	4	2	5	3	3
	Mean	46.6	10.9	19.0	46.5	10.9	35.3	17.1	9.7	24.5	31.0	22.3	4.9	24.5
Proline	Median	2	7	2	2	2	3	2	2	2	2	1	2	2
	Mean	22.5	87.1	17.8	27.1	.5	24.6	24.4	4.0	1.4	29.6	23.9	1.8	24.2
Bingo in Halls	Median	8	2	2	4	0	2	3	4	2	7	2	2	2
	Mean	5.5	7.0	7.1	7.0	6.5	5.2	9.2	5.9	6.8	6.4	9.4	3.4	6.6
Slots In Halifax	Median	0	0	0	0	0	1	0	0	0	0	0	1	0
	Mean	3.0	.8	1.4	2.9	1.5	1.6	1.3	5.2	1.0	3.3	1.7	1.6	2.1
Table Games In Halifax	Median	1	1	1	1	1	1	1	1	1	1	1	1	1
	Mean	2.1	1.0	2.3	2.0	2.4	2.8	1.1	.8	2.1	1.6	2.6	3.4	2.1
Slots In Sydney	Median	2	1	2	2	2	2	1	1	1	1	2	2	2
	Mean	2.0	5.6	.9	4.1	3.7	1.5	3.4	8.9	4.0	5.2	3.6	1.3	3.9
Table Games In Sydn	Median	1	2	0	2	1	1	1	1	0	2	1	2	1
	Mean	2.6	1.6	2.5	2.0	2.9	2.6	1.6	1.0	.7	3.4	1.5	2.1	2.1
VLTs	Median	4	1	3	1	3	3	2	1	1	4	1	1	2
	Mean	14.4	16.5	32.2	27.3	18.7	33.1	11.5	13.9	21.8	22.7	14.0	53.2	23.5
	Median	1	1	3	3	1	2	2	1	1	2	2	3	2

Non-Skilled Foreigners Employed Last Year - Total Adults

[illegible]

Mean/Median Expenditure Per Time For Those Who Played In Last Year

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total Percent
Draws	Mean \$3.43	Mean \$3.27	Mean \$3.35	Mean \$3.66	Mean \$3.07	Mean \$3.67	Mean \$3.21	Mean \$3.24	Mean \$3.31	Mean \$3.44	Mean \$3.27	Mean \$3.45	Mean \$3.36
\$2 Instantants	Median \$3.05	Median \$2.70	Median \$3.14	Median \$3.15	Median \$2.99	Median \$3.34	Median \$3.05	Median \$2.45	Median \$3.23	Median \$2.76	Median \$3.38	Median \$2.93	Median \$3.05
	Mean \$2.05	Mean \$2.02	Mean \$2.12	Mean \$2.22	Mean \$2.09	Mean \$2.42	Mean \$2.17	Mean \$1.68	Mean \$2.32	Mean \$2.22	Mean \$2.42	Mean \$2.12	Mean \$2.22
\$1 Instantants	Mean \$1.49	Mean \$1.68	Mean \$1.69	Mean \$1.71	Mean \$1.59	Mean \$1.66	Mean \$1.73	Mean \$1.37	Mean \$1.68	Mean \$1.56	Mean \$1.80	Mean \$1.34	Mean \$1.63
	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1	Median \$1
Breakopens	Mean \$3.82	Mean \$1.93	Mean \$2.45	Mean \$2.61	Mean \$2.70	Mean \$3.41	Mean \$2.01	Mean \$1.30	Mean \$2.70	Mean \$1.70	Mean \$5.21	Mean \$1.86	Mean \$2.67
	Median \$1	Median \$2	Median \$2	Median \$2	Median \$2	Median \$2	Median \$1	Median \$1	Median \$2	Median \$1	Median \$2	Median \$1	Median \$2
Proline	Mean \$6.81	Mean \$5.07	Mean \$6.67	Mean \$6.77	Mean \$5.00	Mean \$7.66	Mean \$5.36	Mean \$2.00	Mean \$2.00	Mean \$4.57	Mean \$8.02	Mean \$14.52	Mean \$6.66
	Median \$5	Median \$5	Median \$5	Median \$5	Median \$5	Median \$5	Median \$5	Median \$2	Median \$2	Median \$5	Median \$5	Median \$16	Median \$5
Bingo In Halls	Mean \$26.80	Mean \$21.07	Mean \$20.97	Mean \$22.80	Mean \$22.93	Mean \$22.50	Mean \$26.24	Mean \$19.36	Mean \$23.45	Mean \$21.77	Mean \$27.25	Mean \$20.81	Mean \$22.90
	Median \$22	Median \$20	Median \$20	Median \$17	Median \$20	Median \$20	Median \$24	Median \$20	Median \$20	Median \$20	Median \$25	Median \$20	Median \$20
Slot Machines In Halifax	Mean \$23.99	Mean \$51.61	Mean \$44.92	Mean \$46.21	Mean \$25.59	Mean \$40.89	Mean \$26.63	Mean \$37.71	Mean \$90.47	Mean \$32.81	Mean \$22.13	Mean \$15.26	Mean \$35.19
	Median \$20	Median \$22	Median \$20	Median \$20	Median \$20	Median \$10	Median \$20	Median \$20	Median \$20	Median \$20	Median \$20	Median \$10	Median \$20
Table Games In Halifax	Mean \$49.51	Mean \$600.00	Mean \$51.75	Mean \$65.60	Mean \$43.07	Mean \$45.77	Mean \$86.66	Mean \$83.51	Mean \$102.18	Mean \$71.60	Mean \$41.71	Mean \$15.00	Mean \$58.56
	Median \$25	Median \$600	Median \$32	Median \$50	Median \$20	Median \$41	Median \$83	Median \$57	Median \$37	Median \$40	Median \$36	Median \$15	Median \$28
Slot Machines In Sydney	Mean \$44.73	Mean \$30.52	Mean \$13.08	Mean \$28.61	Mean \$29.75	Mean \$25.45	Mean \$18.73	Mean \$58.96	Mean \$17.57	Mean \$57.60	Mean \$16.62	Mean \$20.60	Mean \$29.19
	Median \$20	Median \$20	Median \$10	Median \$20	Median \$14	Median \$18	Median \$15	Median \$20	Median \$14	Median \$20	Median \$16	Median \$20	Median \$20
Table Games In Sydney	Mean \$148.51	Mean \$34.57	Mean \$30.00	Mean \$86.71	Mean \$31.50	Mean \$92.23	Mean \$40.00	Mean \$40.00	Mean \$30.00	Mean \$130.61	Mean \$35.50	Mean \$76.96	Mean \$40
	Median \$200	Median \$37	Median \$30	Median \$40	Median \$33	Median \$35	Median \$42	Median \$40	Median \$30	Median \$197	Median \$40	Median \$40	Median \$40
VLT's	Mean \$14.98	Mean \$12.51	Mean \$19.31	Mean \$21.34	Mean \$10.35	Mean \$16.99	Mean \$13.81	Mean \$17.71	Mean \$23.83	Mean \$14.80	Mean \$14.43	Mean \$9.73	Mean \$16.95
	Median \$10	Median \$9	Median \$5	Median \$8	Median \$5	Median \$5	Median \$5	Median \$4	Median \$10	Median \$5	Median \$5	Median \$5	Median \$5

Non-Median Expenditures Per Time - Total Adults

Region	Health Category	Rugby		Cricket		Age Category			Income Category			Total Percent
		Crane Broken Crown	Other Crane	Male Crane	Female Crane	18-34 years of age	35-54 years of age	55 years of age or older	Between \$25,001 and \$50,000	More Than \$50,000	Revised Don't Know	
North Carolina	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
South Carolina	Men	51	51	51	51	51	51	51	51	51	51	51
	Women	52	52	52	52	52	52	52	52	52	52	52
	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	52	52	52	52	52	52	52	52	52	52	52
Georgia	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Florida	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Alabama	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Mississippi	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Louisiana	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Arkansas	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Tennessee	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Kentucky	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
West Virginia	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Delaware	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Maryland	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Virginia	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
North Carolina	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
South Carolina	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Georgia	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Florida	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Alabama	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Mississippi	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Louisiana	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Arkansas	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Tennessee	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Kentucky	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
West Virginia	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Delaware	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Maryland	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Virginia	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
North Carolina	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
South Carolina	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Georgia	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Florida	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Alabama	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	53	53	53
Mississippi	Men	52	52	52	52	52	52	52	52	52	52	52
	Women	53	53	53	53	53	53	53	53	53	53	53
	Men	53	53	53	53	53	53	53	53	53	53	53
	Women	53	53	53	53	53	53	53	53	5		

**Mean/Median Length Of Time Spent Per Time For Those Who Played In Last Year**

	Region			Gender		Age Category			Income Category				Total	
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know		
Bingo In H	Mean	129.8	115.1	131.0	116.9	132.0	127.9	134.5	123.4	120.3	138.9	134.6	121.6	128.8
Media		120	120	120	136	120	120	120	120	120	146	120	120	120
Slot Machi	Mean	56.9	82.9	68.2	62.3	64.4	59.4	65.1	72.2	120.6	59.3	48.1	52.2	63.4
In Halifax	Media	60	63	30	30	60	30	60	60	120	60	30	30	45
Table Gam	Mean	59.8	120.0	79.7	73.3	60.4	51.6	113.0	73.3	102.5	72.3	62.1	45.0	69.3
In Halifax	Media	45	120	60	60	60	60	120	72	94	60	34	45	60
Slot Machi	Mean	42.2	55.3	54.9	41.1	64.9	45.8	52.8	66.6	42.5	86.2	41.5	28.4	53.2
In Sydney	Media	39	30	23	30	30	30	30	41	30	60	24	30	30
Table Gam	Mean	60.0	34.6	35.0	50.9	13.8	44.6	36.7	60.0	35.0	47.9	45.8		44.4
In Sydney	Media	60	32	35	60	14	60	37	60	35	60	55		60
VLT's	Mean	33.1	41.8	40.0	43.1	30.3	36.1	38.1	51.8	51.1	40.0	27.9	18.6	38.0
Media		29	30	15	20	25	30	20	30	30	20	20	10	20

Mean/Median Length Of Time Spent Per Time - Total Adults

	Region		Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know		
Bingo In Halifax	Mean	18.8	13.7	18.2	6.9	28.3	28.9	12.1	11.6	18.9	18.2	28.2	17.7
	Median	0	0	0	0	0	0	0	0	0	0	0	0
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0
Slot Machine In Halifax	Maximum	210	180	240	210	240	240	180	210	240	180	180	240
	Mean	21.1	6.1	14.3	14.2	16.4	21.5	14.3	9.6	15.1	14.3	13.7	15.3
	Median	0	0	0	0	0	0	0	0	0	0	0	0
Table Game In Halifax	Minimum	0	0	0	0	0	0	0	0	0	0	0	0
	Maximum	350	240	480	480	480	480	240	240	480	300	240	480
	Mean	8.4	1.0	4.9	8.1	3.0	6.9	8.1	9	3.4	6.9	3.4	5.5
Slot Machine In Sydney	Median	0	0	0	0	0	0	0	0	0	0	0	0
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0
	Maximum	240	120	240	240	180	180	240	120	180	240	60	240
Table Game In Sydney	Mean	1.9	23.8	1.8	3.7	5.8	4.4	5.3	4.4	2.9	6.4	2.3	4.8
	Median	0	0	0	0	0	0	0	0	0	0	0	0
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0
Table Game In Sydney	Maximum	120	360	300	120	360	300	180	360	120	360	60	360
	Mean	1.3	1.6	.2	1.5	.1	1.7	.3	.3	.5	1.0	1.1	.8
	Median	0	0	0	0	0	0	0	0	0	0	0	0
VLT's	Minimum	0	0	0	0	0	0	0	0	0	0	0	0
	Maximum	60	60	60	60	20	60	60	60	60	60	0	60
	Mean	7.1	8.9	7.8	10.7	4.9	12.5	7.2	2.9	11.5	7.3	3.8	7.7
	Median	0	0	0	0	0	0	0	0	0	0	0	0
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0
	Maximum	240	120	480	480	360	480	480	120	360	480	120	480

Mean/Median Times Played Last Month For Those Who Played in Last Year

	Region			Gender		Age Category			Income Category					Total
	Halifax County	Cape Breton County	Other County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know		
Draws	Mean	2.4	2.4	2.2	2.6	2.0	1.6	2.2	1.9	2.3	2.5	2.7	2.3	
	Media	1	1	1	1	1	1	1	1	1	1	1	1	
\$2 Instants	Mean	2.3	2.6	1.7	2.3	1.8	2.7	1.5	2.7	1.6	2.2	.8	2.0	
	Media	1	1	0	1	1	1	0	1	1	1	0	1	
\$1 Instants	Mean	.6	.8	1.1	1.4	.5	1.2	.7	1.4	.8	.6	.3	.9	
	Media	0	0	0	0	0	0	0	0	0	0	0	0	
Breakopen	Mean	5.2	1.2	2.2	5.2	1.2	3.5	1.9	2.8	3.4	2.1	.4	2.7	
	Media	0	0	1	1	0	1	0	0	0	1	0	0	
Proline	Mean	2.7	.0	1.5	2.2	.0	3.5	.0	.0	4.1	.6	.0	2.1	
	Media	0	0	0	0	0	0	0	0	0	0	0	0	
Bingo In Ha	Mean	1.0	1.6	.8	1.5	.8	.4	1.2	2.1	.8	1.6	.3	1.0	
	Media	0	0	0	0	0	0	0	1	0	1	0	0	
Slot Machin	Mean	.3	.0	.6	.4	.4	.3	.5	.4	.1	.3	.6	.4	
In Halifax	Media	0	0	0	0	0	0	0	0	0	0	0	0	
Table Gam	Mean	.3	.0	.4	.2	.5	.4	.1	.5	.2	.3	1.0	.3	
In Halifax	Media	0	0	0	0	0	0	0	0	0	0	1	0	
Slot Machin	Mean	.4	.7	.3	.5	.7	.3	.4	1.4	.5	.7	.0	.6	
In Sydney	Media	0	0	0	0	0	0	0	1	0	0	0	0	
Table Gam	Mean	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
In Sydney	Media	0	0	0	0	0	0	0	0	0	0	.0	.0	
VLT's	Mean	1.3	1.4	2.2	2.4	.8	1.9	1.8	2.4	2.0	1.3	.6	1.8	
	Media	1	0	0	1	0	0	0	0	1	0	0	0	





Mean/Median Spent in Last Month For Those Who Played Last Year

	Region			Gender	Age Category			Income Category						
	Halifax County	Cape Breton County	Other County		19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused Don't Know	Total Percent		
Sports Bets	Mean	\$66	\$09	\$659	\$350	Female \$104	\$470	\$137	\$500	\$00	\$120	\$478	\$00	\$281
Horse Racing	Media	0	0	4	0	0	0	0	5	0	0	0	0	0
	Mean	\$9.23	\$31.92	\$16.15	\$22.60	\$4.12	\$1.00	\$16.85	\$34.39	\$0.00	\$26.64	\$11.61	\$8.85	\$16.88
	Media	9	43	0	11	0	0	0	30	0	13	1	12	4
Cards	Mean	\$6.80	\$5.39	\$6.25	\$10.69	\$1.84	\$8.75	\$3.34	\$1.96	\$3.80	\$7.40	\$9.16	\$2.74	\$6.42
Charity	Media	0	0	0	5	0	2	0	0	0	0	0	0	0
	Mean	\$4.27	\$5.56	\$2.24	\$4.94	\$1.98	\$2.21	\$3.38	\$4.73	\$2.47	\$2.65	\$5.72	\$1.05	\$3.33
	Media	0	0	0	0	0	0	0	0	0	0	0	0	0
Internet Gambling	Mean	\$0.00				\$0.00	\$0.00						\$0.00	\$0.00
Satellite/TV Bingo	Media	0				0	0						0	0
	Mean	\$2.00	\$2.21	\$7.03	\$16.92	\$3.50	\$7.06	\$5.45	\$0.00	\$7.87	\$6.47	\$0.00	\$0.00	\$5.90
	Media	0	3	0	4	0	0	0	0	4	4	0	0	0
Other Betting	Mean	\$5.00		\$0.00	\$2.64	\$0.00	\$3.33	\$0.00		\$5.00	\$0.00	\$0.00		\$2.27
	Media	5		0	0	0	0	0		5	0	0		0

Mean/Median Spent in Last Month

Mean/Median Spent In Last Month														
	Region			Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total Percent	
Sports Betting	Mean	\$1.07	\$3.33	\$3.37	\$3.04	\$3.46	\$3.12	\$3.03	\$3.00	\$3.08	\$3.75	\$3.00	\$3.20	
	Median	0	0	0	0	0	0	0	0	0	0	0	0	
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	
Horse Racing	Maximum	5	1	25	8	25	10	5	0	5	25	0	0	
	Mean	\$18	\$92	\$81	\$6	\$2	\$47	\$86	\$00	\$82	\$51	\$19	\$25	
	Median	0	0	0	0	0	0	0	0	0	0	0	0	
Cards	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	
	Maximum	20	50	80	15	4	80	60	0	80	50	20	80	
	Mean	\$160	\$57	\$89	\$29	\$268	\$41	\$12	\$51	\$129	\$172	\$47	\$107	
Charity	Median	0	0	0	0	0	0	0	0	0	0	0	0	
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	
	Maximum	50	20	30	50	15	30	15	20	30	50	10	50	
Internet Gambling	Mean	\$286	\$344	\$291	\$135	\$141	\$230	\$270	\$137	\$171	\$451	\$54	\$212	
	Median	0	0	0	0	0	0	0	0	0	0	0	0	
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	
Satellite TV Bingo	Maximum	200	100	200	50	50	100	200	100	100	200	20	200	
	Mean	\$00	\$00	\$00	\$00	\$00	\$00	\$00	\$00	\$00	\$00	\$00	\$00	
	Median	0	0	0	0	0	0	0	0	0	0	0	0	
Other Betting	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	
	Maximum	\$06	\$04	\$52	\$32	\$30	\$71	\$20	\$81	\$22	\$00	\$00	\$31	
	Mean	0	0	0	0	0	0	0	0	0	0	0	0	
Other Betting	Median	0	0	0	0	0	0	0	0	0	0	0	0	
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	
	Maximum	10	5	60	60	15	60	20	60	20	0	0	60	
	Mean	\$06	\$00	\$00	\$04	\$06	\$00	\$00	\$06	\$00	\$00	\$00	\$02	
	Median	0	0	0	0	0	0	0	0	0	0	0	0	
	Minimum	0	0	0	0	0	0	0	0	0	0	0	0	
	Maximum	10	0	0	10	0	0	0	10	0	0	0	10	

## Levels Of Opposition To Gambling

# Opinion Towards Gambling Activities Currently Available In Nova Scotia

[illegible]

# Opinion Towards Casinos Being Available In Nova Scotia

	Region		Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total
Strongly Disapprove	26%	36%	30%	25%	33%	15%	29%	46%	38%	27%	25%	23%	29%
Disapprove	12%	21%	13%	14%	14%	15%	13%	14%	16%	10%	16%	14%	14%
No Opinion	27%	18%	31%	26%	30%	29%	29%	24%	22%	31%	26%	36%	28%
Approve	27%	22%	20%	26%	19%	29%	23%	15%	20%	23%	26%	22%	23%
Strongly Approve	8%	4%	6%	10%	4%	12%	6%	2%	4%	9%	7%	5%	7%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Opinion Towards VLTs Being Available In Nova Scotia

	Region		Gender	Age Category			Income Category			Total	
	Halifax County	Cape Breton County		19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000		refused/ Don't Know
Strongly Disapprove	45%	49%	43%	48%	30%	46%	50%	44%	47%	35%	46%
Disapprove	25%	18%	20%	20%	30%	18%	21%	19%	23%	16%	20%
No Opinion	13%	17%	15%	20%	16%	19%	16%	16%	12%	35%	17%
Approve	14%	13%	19%	9%	19%	13%	8%	17%	15%	8%	14%
Strongly Approve	3%	2%	4%	3%	5%	4%	3%	4%	3%	5%	4%
Sample Size	179	83	300	300	134	307	159	160	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Opinion Towards Lottery Tickets Being Available In Nova Scotia

	Region		Gender		Age Category			Income Category		
	Halifax County	Cape Breton County	Other County		19-34 years of age	35-54 years of age	5 years older	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know
Strongly Disapprove	7%	5%	8%	Female	1%	7%	15%	7%	7%	11%
Disapprove	5%	9%	11%	Male	3%	10%	13%	6%	11%	10%
No Opinion	16%	19%	22%		16%	20%	18%	19%	18%	12%
Approve	58%	56%	50%		61%	49%	51%	51%	50%	60%
Strongly Approve	13%	12%	12%		18%	14%	3%	16%	14%	6%
Sample Size	179	83	338		134	307	159	216	152	72
Total Percent	100%	100%	100%		100%	100%	100%	100%	100%	100%
										8%
										9%
										18%
										53%
										12%
										600
										100%

# Opinion Towards Binges Being Available In Nova Scotia

	Region			Gender		Age Category			Income Category				Total
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused Don't Know	
Strongly Disapprove	6%	5%	9%	7%	8%	3%	7%	15%	10%	7%	4%	12%	8%
Disapprove	8%	11%	11%	10%	10%	5%	12%	13%	9%	11%	11%	8%	10%
No Opinion	25%	27%	24%	23%	27%	22%	25%	28%	27%	23%	28%	21%	25%
Approve	48%	44%	45%	46%	46%	54%	44%	39%	46%	47%	43%	50%	46%
Strongly Approve	13%	13%	10%	14%	9%	16%	12%	5%	9%	13%	13%	10%	11%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



# Opinion Towards Charity/Non-ALC Lotteries & Draws Being Available In Nova Scotia

	Region		Gender		Age Category			Income Category				Total	
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000		Refused/Don't Know
Strongly Disapprove	4%	2%	2%	3%	2%	1%	2%	5%	3%	2%	1%	5%	3%
Disapprove	2%	5%	4%	4%	4%	2%	5%	5%	4%	4%	4%	2%	4%
No Opinion	8%	11%	13%	10%	12%	11%	8%	16%	12%	10%	11%	14%	11%
Approve	58%	53%	55%	55%	57%	50%	57%	62%	61%	53%	54%	58%	56%
Strongly Approve	27%	29%	26%	29%	24%	37%	28%	12%	20%	31%	30%	21%	26%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%









# Opinion Towards Having Voluntary Exclusion Programs Introduced For VLT Establishments

	Region		Gender		Age Category			Income Category			
	Halifax County	Cape Breton County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know
	7%	6%			5%	5%	6%	3%	7%	5%	4%
Strongly Opposed			5%	4%	5%	5%	6%	3%	7%	5%	4%
Opposed	3%	2%	5%	1%	5%	3%	1%	3%	3%	1%	5%
No Opinion	11%	5%	11%	10%	5%	11%	19%	12%	10%	9%	16%
In Favour	12%	10%	14%	13%	13%	12%	16%	12%	14%	13%	13%
Strongly In Favour	67%	72%	63%	72%	73%	69%	58%	69%	66%	71%	62%
Don't Know/Unsure	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Sample Size	179	83	300	300	134	307	159	160	216	152	72
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
											5%
											3%
											11%
											13%
											68%
											0%
											600
											100%

**Opinion Towards Having Voluntary Exclusion Programs Introduced For Bingos**

	Region		Gender		Age Category			Income Category			Total
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Between \$25,000 and \$50,000	More Than \$50,000	Refused/Don't Know	
Strongly Opposed	11%	14%	11%	8%	12%	9%	9%	14%	7%	8%	10%
Opposed	8%	9%	6%	9%	7%	8%	8%	9%	3%	9%	7%
No Opinion	30%	21%	28%	25%	24%	24%	33%	27%	24%	26%	27%
In Favour	15%	17%	17%	20%	21%	17%	19%	16%	21%	19%	18%
Strongly In Favour	35%	39%	37%	38%	37%	43%	31%	35%	46%	37%	38%
Don't Know/Unsure	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Sample Size	179	83	300	300	134	307	159	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Opinion Towards Having Automated Bank Machines Located In Casinos

	Region		Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total
Strongly Disapprove	58%	77%	69%	63%	70%	57%	58%	76%	67%	73%	60%	62%	67%
Disapprove	13%	11%	10%	9%	13%	15%	10%	8%	12%	7%	16%	11%	11%
No Opinion	19%	5%	12%	17%	10%	16%	13%	10%	12%	13%	12%	18%	13%
Approve	4%	5%	6%	6%	4%	6%	5%	4%	4%	5%	5%	5%	5%
Strongly Approve	7%	2%	4%	5%	4%	5%	5%	4%	4%	2%	7%	5%	4%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



**Opinion Towards Having Automated Bank Machines Located In VLT Sites**

	Region		Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	
Strongly Disapprove	62%	79%	59%	64%	72%	57%	72%	77%	67%	73%	64%	64%	Total
Disapprove	11%	10%	12%	9%	14%	16%	10%	8%	14%	8%	15%	9%	68%
No Opinion	16%	5%	10%	16%	6%	16%	9%	9%	11%	10%	11%	14%	11%
Approve	6%	4%	6%	6%	5%	8%	5%	4%	4%	5%	6%	13%	6%
Strongly Approve	4%	2%	3%	5%	2%	3%	4%	2%	4%	4%	4%	1%	3%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

**Opinion Towards Having Automated Bank Machines Located In Bingo Halls**

	Region			Gender		Age Category			Income Category				Total
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused to Know	
Strongly Disapprove	48%	64%	59%	51%	62%	42%	60%	69%	55%	61%	52%	55%	57%
Disapprove	15%	10%	11%	11%	13%	11%	14%	11%	12%	8%	17%	13%	12%
No Opinion	22%	11%	17%	22%	14%	27%	14%	12%	17%	19%	16%	21%	18%
Approve	9%	12%	8%	10%	8%	15%	7%	5%	9%	8%	10%	9%	9%
Strongly Approve	6%	2%	5%	7%	3%	5%	6%	2%	7%	3%	6%	2%	5%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Opinion Towards Having VLTs In Nova Scotia Accept Bills As Well As Coins

	Region			Gender		Age Category			Income Category		
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000
	44%	60%	50%	44%	55%	39%	48%	64%	57%	47%	48%
Strongly Disapprove	14%	8%	14%	12%	14%	14%	13%	10%	8%	15%	12%
Disapprove	33%	14%	21%	26%	21%	26%	26%	18%	20%	25%	23%
No Opinion	4%	11%	8%	8%	6%	14%	5%	2%	9%	8%	5%
Approve	5%	7%	7%	9%	3%	7%	8%	4%	5%	5%	12%
Strongly Approve	0%	0%	1%	0%	1%	0%	0%	2%	1%	0%	0%
Don't Know/Unsure	179	83	338	300	300	134	307	159	160	216	152
Sample Size	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total	49%	41%	48%	41%	41%	41%	41%	41%	41%	41%	41%

Opinion Towards Having A Player Card In Order To Play VLTs

	Region		Gender	Age Category			Income Category		
	Halifax County	Cape Breton County		19-34 years age	35-54 years age	55 years or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000
Strongly Disapprove	20%	26%	Male	25%	17%	25%	19%	17%	28%
Disapprove	11%	9%	Female	18%	25%	21%	19%	17%	28%
No Opinion	18%	22%	Male	25%	17%	25%	19%	17%	28%
Approve	17%	12%	Female	18%	25%	21%	19%	17%	28%
Strongly Approve	33%	29%	Male	25%	17%	25%	19%	17%	28%
Don't Know/Unsure	0%	1%	Female	2%	0%	5%	0%	0%	3%
Sample Size	179	83	Male	300	134	159	216	152	72
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%

## Problem Gambling

### Aware Of Percentage Of Nova Scotians That Are Problem Gamblers

[illegible]

	Region		Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County	Male	Female	18-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/ Don't Know	Total
1,387	2%	1%	1%	3%	0%	0%	3%	1%	0%	3%	2%	0%	2%
2,002	2%	5%	3%	4%	2%	2%	3%	3%	1%	4%	5%	1%	3%
3,000	3%	1%	2%	3%	1%	1%	3%	2%	1%	2%	4%	3%	2%
4,000	2%	1%	1%	1%	1%	0%	1%	3%	1%	1%	1%	1%	1%
5,000	13%	3%	9%	14%	5%	11%	12%	4%	8%	8%	17%	6%	9%
6,000	1%	0%	1%	1%	0%	0%	2%	0%	0%	1%	0%	0%	1%
7,000	0%	0%	1%	1%	0%	1%	0%	0%	0%	2%	0%	0%	1%
8,000	3%	1%	0%	1%	1%	1%	1%	1%	0%	0%	0%	2%	0%
10,000	9%	0%	10%	11%	8%	7%	11%	9%	6%	10%	12%	0%	9%
11,000	1%	0%	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%
12,000	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
13,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
15,000	4%	1%	0%	5%	4%	5%	5%	5%	2%	4%	6%	7%	5%
18,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
19,000	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
20,000	10%	9%	11%	12%	10%	9%	12%	12%	13%	10%	9%	13%	11%
22,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
25,000	8%	4%	6%	9%	7%	6%	5%	8%	6%	6%	5%	4%	6%
30,000	9%	7%	9%	10%	7%	14%	6%	6%	7%	8%	9%	13%	9%
35,000	1%	0%	4%	3%	4%	3%	3%	3%	2%	2%	3%	1%	3%
40,000	6%	4%	6%	4%	7%	7%	6%	2%	5%	5%	7%	4%	5%
44,000	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	1%
45,000	2%	1%	1%	0%	2%	3%	1%	1%	3%	1%	0%	1%	1%
50,000	4%	15%	6%	6%	12%	10%	8%	10%	13%	9%	3%	7%	9%
60,000	3%	12%	4%	3%	7%	5%	4%	6%	7%	4%	4%	4%	5%
62,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
65,000	2%	5%	1%	2%	2%	3%	1%	1%	2%	2%	1%	1%	2%
70,000	1%	0%	0%	0%	1%	1%	1%	1%	1%	0%	0%	0%	1%
75,000	2%	3%	2%	2%	1%	3%	1%	2%	2%	2%	3%	2%	2%
78,000	2%	0%	0%	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%
80,000	1%	1%	1%	1%	0%	1%	1%	1%	2%	1%	1%	0%	1%
84,000	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
90,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
100,000	6%	9%	10%	6%	12%	2%	8%	18%	9%	8%	6%	18%	9%
Don't Know/Refuse	17%	83	338	300	300	134	307	159	160	218	152	72	600
Sample Size Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Mean/Median % Of Nova Scotian Adults That Are Considered To Be Problem Gamblers

	Region		Gender		Age Category			Income Category		
	Halifax County	Cape Breton County	Other County		19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000
	Male	Female	Male	Female	28.4	23.1	25.0	32.0	24.5	19.0
Mean	22.0	33.4	25.3	20.7	30.4	30.0	20.0	30.0	20.0	15.0
Media	20.00	34.02	20.00	15.47	30.00	20.00	20.00	30.00	20.00	15.00
Total	25.4	25.2	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00

## Personally Aware Of A Past Or Present Problem Gambler

	Region		Gender		Age Category			Income Category		
	Halifax County	Cape Breton County	Other County		19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000
	Male	Female	Male	Female	60%	49%	36%	51%	52%	53%
Yes	44%	46%	53%	47%	40%	49%	63%	48%	48%	47%
No	54%	54%	47%	53%	0%	1%	1%	2%	0%	0%
Don't Know/U	1%	0%	1%	0%	134	307	159	160	216	152
Sample Size	179	83	300	300	100%	100%	100%	100%	100%	100%
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total	49%	49%	50%	49%	68%	68%	72	600	100%	100%

# Relationship Of Problem Gambler

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total
TOTAL Problem Gamblers	1%	2%	1%	1%	1%	2%	1%	1%	2%	0%	2%	0%	1%
Household Family Member	3%	1%	1%	2%	2%	3%	2%	1%	4%	1%	2%	0%	2%
Household Non-Family Mem	1%	2%	3%	4%	1%	3%	2%	1%	2%	1%	3%	1%	2%
Immediate Family - Not in H	3%	2%	4%	2%	5%	7%	3%	1%	7%	3%	3%	0%	4%
Other Family - Not in HH	5%	6%	7%	7%	6%	8%	6%	6%	4%	7%	8%	7%	7%
Someone Other	41%	37%	46%	47%	39%	51%	45%	30%	44%	45%	48%	27%	43%
Missing	56%	54%	47%	48%	53%	40%	51%	64%	49%	48%	47%	70%	51%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



Mean/Median # Of Problem Gamblers That Are...

	Region		Gender		Age Category			Income Category				Total Percent
	Halifax County	Cape Breton County	Other County	Male	Female	19-34 years of age	35-54 years of age	55 years and older	Up To 25,000	25,001 To 50,000	More Than 50,000	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	
Family Members	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Household - Non-Family Member	1.4	2.2	1.3	1.2	2.6	1.4	1.2	3.0	1.0	2.1	1.6	1.4
Immediate Family - Not In Household	1.3	1.4	1.7	2.2	1.2	1.2	2.4	1.0	1.6	1.4	1.4	1.5
Other Family - Not In Household	1.3	1.0	2.2	2.0	1.7	1.1	2.1	2.7	3.2	1.5	1.7	1.9
Other People	3.6	5.4	4.0	4.4	3.6	3.3	4.8	3.8	4.4	3.9	4.1	4.0
	2	3	2	2	2	2	2	2	2	2	2	2

Types Of Gambling They Do/Did Have Problem With...

	Region			Gender		Age Category			Income Category				Total
	Halifax County	Cape Breton County	Other County	Male	Female	19-34 years of age	35-54 years of age	55 years or older	Up To \$25,000	Between \$25,001 \$50,000	More Than \$50,000	Refused/ Don't Know	
Lottery Draws	0%	2%	1%	1%	1%	1%	1%	1%	0%	1%	2%	0%	1%
\$2 Instanta	1%	4%	1%	0%	2%	2%	0%	2%	4%	0%	1%	0%	1%
\$1 Instanta	0%	4%	0%	0%	1%	1%	0%	1%	2%	0%	1%	0%	1%
Breakopens	0%	1%	1%	0%	1%	0%	1%	1%	0%	0%	2%	0%	1%
Bingo In Halls	2%	4%	4%	2%	5%	2%	3%	7%	6%	3%	3%	0%	3%
Slot Machines	10%	27%	6%	9%	11%	10%	12%	7%	12%	8%	14%	4%	10%
Table Games	3%	7%	1%	5%	1%	3%	2%	3%	1%	2%	6%	1%	3%
VLTs	36%	25%	45%	41%	38%	50%	41%	24%	40%	44%	40%	25%	40%
Sports Bets/Pools	1%	0%	1%	1%	0%	1%	1%	0%	0%	1%	0%	0%	0%
Horse Racing	0%	0%	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%
Card Games	2%	4%	1%	2%	1%	1%	1%	4%	2%	1%	2%	0%	2%
Scratch Tickets In General	0%	1%	2%	1%	2%	2%	1%	2%	2%	2%	1%	1%	1%
Other Gambling	1%	0%	2%	2%	1%	0%	2%	2%	1%	2%	1%	1%	1%
All Gambling In General	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%	0%
Casinos In General	1%	0%	0%	1%	1%	1%	1%	0%	1%	1%	0%	0%	0%
Don't Know/Unsure	1%	0%	1%	1%	1%	1%	1%	0%	1%	1%	0%	0%	1%
Missing	56%	54%	47%	48%	53%	40%	51%	64%	49%	48%	47%	70%	51%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Aware Of Any Assistance Or Services In Place To Help Problem Gamblers

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total
Yes	61%	62%	56%	61%	56%	68%	58%	47%	61%	55%	64%	51%	58%
No	35%	35%	41%	37%	39%	30%	37%	49%	37%	42%	32%	43%	38%
Don't Know/U	3%	3%	4%	2%	5%	2%	5%	3%	3%	4%	3%	6%	4%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

## Support Services Available To Assist Problem Gamblers Or Their Families

[illegible]

**Ever Sought Assistance/Information From Informal Sources To Help Either Myself Or Someone Else With A Gambling Problem**

	Region			Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County		Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused To Know	Total
Yes - Help Self/Themselves	0%	1%	0%		0%	0%	1%	0%	0%	1%	0%	0%	0%	0%
Yes - Help Someone Else	5%	1%	4%		3%	5%	6%	3%	2%	3%	2%	4%	8%	4%
No	40%	44%	49%		49%	42%	53%	46%	34%	47%	50%	49%	22%	45%
Missing	56%	54%	47%		48%	53%	40%	51%	64%	49%	48%	47%	70%	51%
	Sample Size	179	83		300	300	134	307	159	160	216	152	72	600
	Total Percent	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

**Anyone In Household Ever Sought Assistance/Information To Help Either Themselves Or Someone Else With A Gambling Problem**

	Region			Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County		Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age and older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused to Know	Total
Yes - Help Self/Themselves	1%	0%	0%		0%	0%	1%	0%	0%	1%	0%	0%	0%	0%
Yes - Help Someone Else	2%	0%	3%		2%	3%	3%	2%	1%	2%	2%	1%	5%	2%
No	97%	100%	97%		98%	97%	97%	98%	99%	97%	98%	99%	95%	98%
Sample Size	179	83	338		300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Sources Accessed In Order To Get Assistance/Information For Problem Gambling

	Region			Gender		Age Category				Income Category			
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	between \$25,001 and \$50,000	More Than \$50,000	Refused Don't Know	Total
Spouse/Partner	0%	1%	0%	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%
Other Family	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	2%	0%
Employer/Colleague	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	2%	0%
Friends	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Church/Religious Groups	1%	0%	1%	1%	0%	1%	1%	0%	1%	0%	2%	0%	1%
Family Doctor, Therapist	1%	0%	0%	0%	1%	1%	0%	1%	1%	0%	1%	0%	0%
Gamblers Anonymous	2%	2%	1%	1%	2%	1%	2%	1%	1%	0%	2%	3%	1%
Other Gambling Self-Help Group	2%	0%	1%	0%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Drug Dependency	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	0%	1%	1%
Gambling Helpline	1%	0%	2%	1%	2%	3%	1%	1%	0%	1%	0%	0%	0%
Community Counselors	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	5%	2%
Something Other	2%	0%	2%	1%	2%	3%	0%	0%	1%	0%	0%	0%	0%
Don't Know/Unsure	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	0%
Missing	94%	98%	95%	96%	95%	93%	96%	97%	94%	98%	95%	91%	95%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



For the most part, gambling and games of chance are fun and entertaining

For the most part, gambling and games of chance are fun and entertaining											
	Region		Gender	Age Category			Income Category				
	Halifax County	Cape Breton County		19 - 34 years of age		35 - 54 years of age	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused Don't Know	
				Male	Female						
Strongly Disagree	14%	18%	19%	12%	18%	29%	24%	16%	17%	16%	18%
Disagree	15%	18%	16%	11%	13%	13%	14%	16%	12%	17%	14%
Neutral	22%	23%	20%	15%	18%	18%	16%	20%	22%	18%	19%
Agree	35%	31%	33%	45%	28%	29%	33%	36%	32%	34%	34%
Strongly Agree	13%	10%	12%	16%	15%	10%	12%	12%	18%	15%	14%
Sample Size	179	83	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



The government should be responsible for offering programs to help problem gamblers and their families

The government should be responsible for offering programs to help problem gamblers											
	Region		Gender		Age Category		Income Category				Total
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35-54 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	
Strongly Disagree	5%	8%	5%	5%	3%	7%	5%	4%	6%	7%	5%
Disagree	5%	2%	4%	6%	6%	4%	5%	5%	5%	5%	5%
Neutral	10%	3%	8%	12%	9%	11%	6%	11%	9%	18%	10%
Agree	20%	10%	19%	16%	22%	17%	10%	19%	19%	25%	17%
Strongly Agree	60%	77%	65%	61%	60%	62%	74%	61%	61%	45%	63%
Sample Size	179	83	300	300	134	307	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



Everyone who gambles will, on occasion, spend more money than they intended to

	Region			Gender	Age Category			Income Category			
	Halifax County	Cape Breton County	Other County		19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know
	6%	3%	4%		Male	Female					Total
Strongly Disagree	5%	4%	5%	5%	4%	4%	3%	3%	4%	9%	4%
Disagree	5%	1%	6%	7%	3%	4%	7%	7%	3%	5%	5%
Neutral	5%	26%	20%	4%	6%	5%	4%	6%	7%	3%	5%
Agree	24%	66%	65%	26%	18%	24%	20%	19%	26%	17%	22%
Strongly Agree	60%	83	338	59%	68%	63%	67%	64%	59%	66%	64%
Sample Size	179	83	338	300	300	134	307	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Advertising for gambling encourages people to gamble too much

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total
Strongly Disagree	11%	5%	8%	8%	9%	9%	8%	7%	7%	7%	11%	10%	8%
Disagree	14%	8%	16%	15%	13%	16%	16%	10%	12%	16%	13%	18%	14%
Neutral	20%	15%	16%	18%	16%	18%	19%	11%	13%	16%	22%	19%	17%
Agree	28%	30%	25%	29%	25%	29%	25%	27%	23%	30%	28%	25%	27%
Strongly Agree	27%	42%	35%	30%	37%	26%	32%	45%	45%	31%	25%	29%	34%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Gambling such as lotteries, casinos and other games of chance are a good way for governments to generate revenue

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County		Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know
Strongly Disagree	21%	22%	21%		19%	23%	15%	19%	31%	18%	22%	28%	16%
Disagree	12%	14%	10%		12%	10%	11%	11%	11%	10%	10%	14%	11%
Neutral	18%	11%	12%		12%	15%	13%	16%	10%	10%	14%	13%	21%
Agree	25%	22%	25%		26%	23%	31%	23%	19%	26%	25%	24%	19%
Strongly Agree	24%	30%	33%		32%	28%	30%	31%	29%	36%	29%	22%	33%
Sample Size	179	83	338		300	300	134	307	159	160	216	152	72
Total Percent	100%	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%	100%



I would prefer VLTs were reduced or eliminated in Nova Scotia, even if it meant higher taxes for me

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,000 and \$50,000	More Than \$50,000	Refused/Don't Know	Total
Strongly Disagree	14%	16%	13%	17%	10%	15%	14%	11%	14%	14%	11%	15%	13%
Disagree	11%	15%	13%	15%	11%	12%	15%	10%	12%	12%	14%	15%	13%
Neutral	21%	17%	18%	17%	20%	24%	19%	11%	18%	19%	18%	20%	18%
Agree	23%	14%	20%	19%	21%	23%	16%	23%	21%	21%	17%	21%	20%
Strongly Agree	32%	38%	36%	32%	38%	26%	36%	44%	35%	34%	41%	27%	35%
Don't Know/Unsur	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	2%	0%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Similar to tobacco and alcohol advertising, there should be restrictions on advertising for gambling and games of chance

	Region			Gender		Age Category			Income Category				Total
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000		
											Know	Refused	
Strongly Disagree	4%	9%	6%	6%	6%	5%	6%	6%	6%	5%	5%	6%	6%
Disagree	8%	6%	4%	7%	4%	7%	7%	4%	3%	5%	11%	6%	6%
Neutral	15%	3%	13%	16%	9%	12%	14%	11%	8%	13%	13%	19%	12%
Agree	24%	20%	26%	24%	26%	27%	27%	19%	24%	26%	24%	25%	25%
Strongly Agree	48%	62%	50%	47%	55%	49%	47%	60%	58%	50%	47%	44%	51%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



I feel there is too much attention given to problem gambling in Nova Scotia

	Region			Gender		Age Category			Income Category			Total
	Halifax County	Cape Breton County		Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	
Strongly Disagree	52%	45%	48%	49%	48%	50%	48%	48%	50%	50%	38%	49%
Disagree	25%	27%	23%	26%	22%	23%	26%	23%	25%	22%	21%	24%
Neutral	12%	12%	15%	12%	16%	12%	14%	15%	9%	15%	25%	14%
Agree	8%	11%	7%	9%	7%	12%	7%	4%	8%	10%	8%	8%
Strongly Agree	3%	5%	7%	4%	7%	3%	5%	9%	8%	3%	7%	6%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

The government needs to take a more active role in promoting and educating people on how to gamble responsibly

	Region		Gender		Age Category			Income Category			
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know
Strongly Disagree	8%	10%	8%	9%	2%	10%	15%	7%	9%	10%	12%
Disagree	10%	4%	7%	7%	7%	8%	7%	4%	7%	9%	12%
Neutral	18%	3%	17%	14%	15%	15%	17%	11%	18%	17%	19%
Agree	23%	22%	20%	24%	32%	21%	12%	22%	24%	24%	14%
Strongly Agree	41%	60%	48%	44%	45%	46%	49%	56%	43%	40%	44%
Don't Know/Unsur	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
Sample Size	179	83	300	300	134	307	159	160	216	152	72
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

**Gambling advertising encourages children and youth to gamble**

	Region			Gender		Age Category				Income Category			
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/ Don't Know	Total
Strongly Disagree	10%	6%	9%	11%	8%	12%	9%	6%	7%	10%	9%	11%	9%
Disagree	15%	12%	12%	13%	12%	14%	14%	10%	11%	16%	14%	8%	13%
Neutral	20%	7%	17%	18%	15%	21%	19%	8%	16%	16%	18%	18%	17%
Agree	30%	26%	26%	29%	26%	27%	27%	28%	24%	27%	29%	33%	27%
Strongly Agree	24%	49%	36%	29%	39%	26%	31%	48%	43%	31%	31%	30%	34%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

**Gambling such as lotteries and games of chance are a good way for charities to raise money**

[illegible]

I think gambling in Nova Scotia takes advantage of those who can least afford to play

	Region		Gender		Age Category			Income Category			Total
	Halifax County	Cape Breton County	Other County		19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	
	8%	5%	7%	Male 7%	Female 8%	8%	7%	5%	6%	8%	
Strongly Disagree	13%	7%	7%	7%	10%	13%	4%	12%	7%	10%	8%
Disagree	18%	9%	15%	15%	15%	19%	7%	8%	15%	14%	9%
Neutral	19%	17%	20%	23%	16%	17%	21%	13%	22%	23%	15%
Agree	45%	62%	52%	48%	54%	42%	66%	62%	50%	45%	19%
Strongly Agree	179	83	338	300	300	134	159	160	216	152	51%
Sample Size	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	600
Total Percent											100%

I have enough information on problem gambling to tell if someone in my household has a problem with gambling

	Region		Gender		Age Category			Income Category			Total
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Between \$25,001 and \$50,000	More Than \$50,000	
	10%	12%	11%	10%	11%	10%	9%	14%	12%	10%	
Strongly Disagree	10%	5%	11%	10%	10%	11%	12%	6%	8%	14%	11%
Disagree	16%	10%	13%	16%	11%	8%	13%	22%	12%	18%	10%
Neutral	34%	40%	29%	35%	29%	35%	34%	26%	37%	30%	14%
Agree	30%	34%	35%	28%	39%	36%	33%	32%	31%	29%	32%
Strongly Agree	179	83	338	300	300	134	307	159	216	152	33%
Sample Size	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

If the government banned VLTs then the players would simply spend the money on other gambling activities

	Region			Gender	Age Category			Income Category					
	Halifax County	Cape Breton County	Other County		19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/ Know		
Strongly Disagree	11%	9%	11%		Male 12%	Female 9%	10%	11%	10%	11%	15%	6%	11%
Disagree	18%	16%	15%		14%	18%	14%	20%	12%	15%	16%	17%	16%
Neutral	16%	6%	17%		17%	14%	14%	13%	20%	13%	12%	18%	15%
Agree	32%	23%	27%		29%	26%	32%	28%	23%	20%	32%	33%	28%
Strongly Agree	22%	46%	31%		27%	33%	29%	27%	35%	43%	29%	16%	30%
Sample Size	179	83	338		300	300	134	307	159	160	216	152	600
Total Percent	100%	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%	100%

The majority of people who gamble do not have any problems with their gambling

	Region		Gender		Age Category			Income Category				Total	
	Halifax County	Cape Breton County	Other County	Male	Female	19-34 years of age	35-54 years of age	55 years or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000		Refused/Don't Know
Strongly Disagree	19%	24%	24%	18%	26%	23%	20%	25%	30%	22%	15%	21%	22%
Disagree	21%	19%	20%	21%	20%	23%	19%	18%	21%	22%	16%	20%	20%
Neutral	25%	18%	25%	21%	27%	23%	26%	24%	20%	19%	37%	27%	24%
Agree	22%	22%	22%	27%	16%	18%	25%	21%	20%	22%	22%	24%	22%
Strongly Agree	13%	17%	9%	12%	10%	12%	11%	11%	9%	14%	11%	8%	11%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%





## **KNOWLEDGEABILITY & INTEREST IN INFORMATION**

The Impact of problem gambling in Nova Scotia

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/	
												Don't Know	
Not At All Knowledgeable	41%	53%	42%	43%	43%	35%	43%	52%	44%	41%	38%	55%	43%
Somewhat Knowledgeable	53%	37%	50%	48%	50%	58%	47%	43%	45%	52%	53%	41%	49%
Very Knowledgeable	6%	10%	9%	8%	8%	7%	10%	6%	11%	6%	9%	4%	8%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Not At All Interested	31%	32%	36%	30%	37%	24%	33%	46%	33%	30%	31%	51%	34%
Somewhat Interested	42%	37%	41%	41%	40%	49%	38%	35%	41%	43%	39%	35%	41%
Very Interested	27%	31%	23%	28%	23%	27%	28%	19%	26%	26%	30%	14%	25%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



Services available to help problem gamblers and their families

	Region		Gender		Age Category			Income Category			Total
	Halifax County	Cape Breton County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	
Not At All Knowledgeable	52%	47%	52%	49%	44%	50%	59%	45%	52%	55%	51%
Somewhat Knowledgeable	46%	45%	45%	43%	47%	47%	37%	46%	45%	43%	44%
Very Knowledgeable	2%	7%	3%	8%	10%	3%	4%	9%	4%	2%	5%
Sample Size	179	83	300	300	134	307	159	160	216	152	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Not At All Interested	40%	36%	33%	39%	27%	37%	45%	30%	35%	34%	36%
Somewhat Interested	35%	34%	41%	37%	47%	36%	34%	46%	35%	38%	39%
Very Interested	25%	30%	26%	24%	25%	27%	21%	24%	30%	28%	25%
Sample Size	179	83	300	300	134	307	159	160	216	152	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Early warning signs that someone may be having problems with their gambling

	Region		Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	refused/Don't Know	Total
Not At All Knowledgeable Somewhat Knowledgeable Very Knowledgeable Sample Size Total Percent	37%	40%	45%	37%	32%	38%	55%	42%	37%	40%	49%	41%
	55%	49%	47%	53%	59%	53%	36%	48%	53%	51%	42%	50%
	9%	10%	8%	11%	10%	9%	9%	10%	9%	9%	9%	9%
	179	83	300	300	134	307	159	160	216	152	72	600
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Not At All Interested Somewhat Interested Very Interested Sample Size Total Percent	35%	39%	30%	39%	26%	32%	48%	32%	30%	32%	58%	34%
	38%	37%	41%	36%	41%	41%	32%	45%	39%	35%	30%	39%
	28%	24%	29%	25%	33%	27%	20%	23%	31%	34%	12%	27%
	179	83	300	300	134	307	159	160	216	152	72	600
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

The amount of money generated by gambling in Nova Scotia

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total
Not At All Knowledgeable Somewhat Knowledgeable Very Knowledgeable Sample Size Total Percent	80%	68%	87%	61%	69%	64%	63%	68%	68%	62%	62%	73%	65%
	34%	28%	28%	33%	27%	29%	32%	28%	30%	32%	30%	23%	30%
	6%	7%	5%	6%	5%	7%	6%	4%	4%	6%	7%	4%	5%
	179	83	338	300	300	134	307	159	160	216	152	72	600
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Not At All Interested Somewhat Interested Very Interested Sample Size Total Percent	30%	39%	31%	27%	37%	24%	29%	45%	36%	26%	29%	44%	32%
	29%	30%	26%	31%	26%	32%	31%	21%	24%	29%	30%	35%	29%
	41%	31%	40%	42%	37%	44%	40%	33%	40%	45%	40%	21%	39%
	179	83	338	300	300	134	307	159	160	216	152	72	600
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

How the money from gambling is used in Nova Scotia

	Region		Gender		Age Category			Income Category				Total
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35-54 years of age	55 years and older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	refused/Don't Know	
NOT AT ALL Knowledgeable	72%	77%	71%	79%	75%	75%	76%	76%	79%	71%	72%	75%
Somewhat Knowledgeable	24%	18%	23%	14%	15%	22%	18%	17%	17%	25%	13%	19%
Very Knowledgeable	4%	5%	6%	6%	11%	3%	6%	7%	4%	4%	14%	6%
Sample Size	179	83	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Not At All Interested	19%	28%	19%	20%	14%	15%	32%	24%	13%	14%	34%	19%
Somewhat Interested	24%	20%	26%	20%	18%	27%	22%	21%	24%	21%	28%	23%
Very Interested	57%	51%	55%	60%	68%	57%	46%	55%	63%	64%	38%	58%
Sample Size	179	83	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



The Impact of gambling on children and youth in Nova Scotia

	Region		Gender		Age Category			Income Category			Total
	Halifax County	Cape Breton County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	
Not At All Knowledgeable	69%	69%	70%	66%	66%	66%	72%	66%	69%	66%	68%
Somewhat Knowledgeable	28%	26%	27%	29%	29%	29%	24%	28%	28%	30%	28%
Very Knowledgeable	3%	5%	4%	5%	5%	5%	4%	6%	3%	4%	4%
Sample Size	179	83	300	300	134	307	159	160	216	152	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Not At All Interested	26%	34%	24%	26%	20%	19%	40%	29%	19%	19%	25%
Somewhat Interested	30%	34%	38%	31%	35%	36%	33%	39%	35%	32%	35%
Very Interested	44%	32%	38%	42%	45%	45%	26%	32%	45%	50%	40%
Sample Size	179	83	300	300	134	307	159	160	216	152	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# The impact of gambling for seniors in Nova Scotia

	Region		Gender		Age Category		Income Category					
	Halifax County	Cape Breton County	Male	Female	19 - 34 years of age	35 - 54 years of age	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total	
Not At All Knowledgeable	64%	56%	71%	65%	68%	70%	65%	62%	71%	66%	74%	68%
Somewhat Knowledgeable	33%	32%	26%	29%	27%	25%	32%	30%	25%	31%	23%	28%
Very Knowledgeable	4%	12%	3%	6%	5%	6%	3%	7%	5%	2%	3%	5%
Sample Size	179	83	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Not At All Interested	29%	37%	30%	32%	26%	28%	42%	36%	25%	23%	54%	31%
Somewhat Interested	34%	38%	41%	35%	42%	39%	33%	38%	41%	37%	32%	38%
Very Interested	37%	25%	29%	33%	32%	33%	25%	26%	34%	40%	14%	31%
Sample Size	179	83	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

On how games of chance are operated and regulated in Nova Scotia

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/ Don't Know	Total
Not At All Knowledgeable	63%	77%	71%	66%	73%	65%	69%	76%	69%	72%	64%	74%	70%
Somewhat Knowledgeable	36%	23%	26%	32%	25%	34%	28%	23%	28%	27%	33%	24%	28%
Very Knowledgeable	1%	1%	3%	2%	2%	1%	3%	1%	3%	1%	3%	2%	2%
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Not At All Interested	33%	46%	36%	33%	39%	28%	32%	53%	41%	26%	35%	59%	36%
Somewhat Interested	35%	34%	38%	36%	36%	40%	38%	30%	32%	42%	35%	32%	36%
Very Interested	32%	20%	26%	30%	24%	32%	30%	17%	27%	33%	30%	8%	27%
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600

On how to play games of chance responsibly (responsible gaming)

	Region		Gender		Age Category			Income Category			Total
	Halifax County	Cape Breton County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	
Not At All Knowledgeable	35%	50%	44%	42%	33%	41%	59%	45%	34%	41%	43%
Somewhat Knowledgeable	39%	32%	35%	33%	35%	39%	26%	35%	37%	37%	34%
Very Knowledgeable	26%	17%	21%	24%	32%	20%	15%	21%	29%	21%	23%
Sample Size	179	83	300	300	134	307	159	160	216	152	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Not At All Interested	43%	58%	46%	49%	34%	44%	68%	50%	41%	46%	48%
Somewhat Interested	36%	24%	33%	36%	41%	36%	24%	36%	37%	31%	34%
Very Interested	21%	18%	21%	15%	25%	20%	8%	14%	21%	23%	18%
Sample Size	179	83	300	300	134	307	159	160	216	152	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



# Education Level

	Region		Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Male	Female	19-34 years of age	35 - 54 years of age	55 years of age and older	Up To 25,000	25,001 and 50,000	More Than 50,000	Refused to Know	Total
No Formal Schooling	1%	0%	1%	1%	0%	0%	2%	2%	0%	0%	0%	1%
Elementary To Some High School (Gr 1-8)	13%	33%	29%	20%	11%	20%	47%	45%	17%	5%	32%	24%
Graduated High School	27%	39%	28%	28%	31%	29%	22%	25%	36%	20%	28%	28%
Some Community College/Trade School	6%	5%	7%	11%	12%	9%	5%	8%	12%	6%	8%	9%
Completed Community College/Trade School	18%	12%	11%	13%	13%	13%	9%	9%	14%	14%	8%	12%
Some University	9%	0%	7%	7%	10%	6%	6%	6%	6%	9%	9%	7%
Completed University	23%	6%	13%	16%	22%	14%	6%	3%	12%	32%	12%	14%
Post Graduate	4%	4%	5%	4%	2%	7%	4%	1%	2%	13%	2%	4%
No Answer/Refused	0%	1%	0%	1%	0%	1%	1%	1%	0%	0%	2%	0%
Sample Size	179	83	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Age Category

	Region			Gender		Income Category				Total
	Halifax County	Cape Breton County	Other County	Male	Female	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	
19 -34 years of age	40%	24%	30%	30%	34%	37%	33%	28%	28%	32%
35 - 54 years of age	40%	45%	40%	43%	38%	24%	45%	56%	34%	40%
55 years of age or older	20%	31%	30%	26%	28%	40%	21%	15%	40%	27%
Sample Size	179	83	338	300	300	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Income Category

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	
												Total	
Up To \$15,000	3%	27%	9%	4%	14%	10%	6%	13%	32%	0%	0%	0%	9%
Between \$15,001 and \$25,000	13%	17%	24%	20%	20%	22%	11%	29%	68%	0%	0%	0%	20%
Between \$25,001 and \$50,000	37%	28%	36%	40%	31%	36%	40%	28%	0%	100%	0%	0%	35%
Between \$50,001 and \$70,000	20%	9%	13%	17%	12%	14%	19%	9%	0%	0%	63%	0%	15%
More Than \$70,000	14%	6%	6%	9%	9%	7%	14%	3%	0%	0%	37%	0%	9%
Refused	9%	10%	8%	7%	10%	3%	9%	14%	0%	0%	0%	71%	9%
Don't Know	4%	4%	3%	2%	5%	6%	1%	4%	0%	0%	0%	29%	4%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%





# Mean/Median # Of People Contributing To Household Income

	Region		Gender		Age Category			Income Category				Total	
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	5 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000		refused/ Don't Know
Mean	1.9	1.6	1.7	1.9	1.7	1.9	1.8	1.7	1.5	1.8	2.0	1.9	1.8
Median	2	2	2	2	2	2	2	2	1	2	2	2	2

# # Of People Living In Household

	Region			Gender		Age Category				Income Category				Total
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/ Don't Know		
1	14%	12%	15%	16%	13%	14%	9%	23%	27%	13%	2%	13%	14%	
2	28%	44%	40%	32%	42%	30%	26%	62%	45%	35%	29%	40%	37%	
3	23%	20%	16%	19%	19%	23%	21%	10%	12%	23%	20%	20%	19%	
4	21%	16%	20%	21%	18%	23%	28%	3%	11%	19%	30%	23%	20%	
5	11%	7%	7%	9%	7%	8%	14%	0%	5%	8%	15%	4%	8%	
6	2%	1%	1%	2%	0%	1%	1%	1%	0%	1%	3%	0%	1%	
7	1%	0%	0%	0%	1%	0%	1%	0%	0%	1%	1%	0%	1%	
9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600	
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Mean/Median # Of People In Household Who Play Games Of Chance Regularly

	Region		Gender		Age Category			Income Category		
	Halifax County	Cape Breton County	Other County		19-34 years of age	35-54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Mean	.2	.2	.2	.1	.3	.2	.1	.1	.2	.2
Median	0	0	0	0	0	0	0	0	0	0
Total	.2	.2	.2	.1	.3	.2	.1	.1	.2	.2

# # Of Children Under 19 Years Of Age In Household

	Region			Gender		Age Category			Income Category			
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	55 years of age or older	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	Total
0	61%	53%	63%	62%	59%	53%	42%	98%	71%	59%	45%	73%
1	14%	24%	17%	14%	20%	27%	20%	2%	16%	18%	19%	13%
2	16%	15%	15%	16%	14%	14%	26%	0%	8%	15%	26%	11%
3	8%	7%	5%	7%	5%	6%	10%	0%	4%	8%	9%	3%
4	0%	0%	1%	0%	1%	0%	1%	1%	1%	0%	0%	0%
5	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Mean/Median # Of Children Under 19 Years Of Age In Household

	Region		Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	5 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused Don't Know	Total
Mean	.7	.8	.7	.7	.7	.7	1.1	.0	.5	.7	1.0	.4	.7
Median	0	0	0	0	0	0	1	0	0	0	1	0	0

# Children In Household Ever Played...

	Region			Gender		Age Category			Income Category					
	Halifax County	Cape Breton County	Other County		Male	Female	19 -34 years of age	35 - 54 years of age	55 years or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/Don't Know	
											Total			
Lottery Tickets	7%	6%	6%		6%	7%	4%	13%	0%	3%	8%	9%	4%	6%
Bingo In Halls	4%	3%	5%		5%	4%	5%	8%	0%	1%	8%	6%	0%	5%
Card Games	4%	2%	1%		2%	2%	0%	5%	0%	1%	2%	4%	1%	2%
Other Games/Gambling	1%	0%	3%		2%	2%	4%	2%	0%	0%	2%	6%	1%	2%
Missing	61%	53%	63%		62%	59%	53%	42%	98%	71%	59%	45%	73%	61%
Sample Size	179	83	338		300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Area Of Residence

	Region			Gender		Age Category			Income Category				Total
	Halifax County	Cape Breton County	Other County	Male	Female	19 - 34 years of age	35 - 54 years of age	5 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused to Know	
Urban	90%	80%	34%	57%	58%	65%	57%	49%	49%	55%	70%	59%	58%
Rural	10%	20%	66%	43%	42%	35%	43%	51%	51%	45%	30%	41%	42%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



# County Of Residence

	Region			Gender		Age Category			Income Category				
	Halifax County	Cape Breton County	Other County	Male	Female	19 -34 years of age	35 - 54 years of age	55 years of age or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/ Don't Know	Total
Annapolis	0%	0%	4%	2%	3%	1%	2%	4%	4%	2%	1%	4%	2%
Antigonish	0%	0%	4%	2%	2%	1%	3%	2%	2%	1%	3%	2%	2%
Cape Breton	0%	100%	0%	12%	15%	10%	15%	15%	20%	11%	9%	14%	13%
Colechester	0%	0%	12%	5%	8%	6%	6%	9%	9%	4%	9%	4%	7%
Cumberland	0%	0%	5%	1%	5%	3%	3%	4%	3%	3%	0%	9%	3%
Digby	0%	0%	4%	1%	3%	3%	1%	3%	4%	2%	1%	1%	2%
Guysborough	0%	0%	3%	2%	1%	1%	2%	2%	3%	2%	1%	0%	2%
Halifax	100%	0%	0%	34%	28%	38%	31%	23%	17%	32%	45%	33%	31%
Hants	0%	0%	7%	4%	4%	1%	7%	2%	4%	4%	4%	3%	4%
Inverness	0%	0%	3%	2%	1%	1%	2%	2%	2%	0%	2%	1%	1%
Kings	0%	0%	13%	7%	8%	8%	6%	8%	6%	11%	5%	4%	7%
Lunenburg	0%	0%	14%	8%	7%	10%	7%	6%	8%	7%	7%	9%	8%
Pictou	0%	0%	11%	8%	5%	6%	7%	6%	7%	7%	5%	6%	6%
Queens	0%	0%	3%	2%	1%	0%	2%	2%	2%	2%	1%	0%	1%
Richmond	0%	0%	2%	1%	1%	1%	1%	1%	1%	2%	0%	1%	1%
Shelburne	0%	0%	5%	3%	3%	1%	2%	5%	4%	3%	1%	2%	3%
Victoria	0%	0%	2%	2%	0%	3%	1%	1%	0%	1%	3%	1%	1%
Yarmouth	0%	0%	8%	5%	4%	7%	4%	2%	6%	5%	1%	5%	4%
Sample Size	179	83	338	300	300	134	307	159	160	216	152	72	600
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

# Gender

	Region		Age Category			Income Category			
	Halifax County	Cape Breton County	19 -34 years of age	35 - 54 years of age	55 years or older	Up To \$25,000	Between \$25,001 and \$50,000	More Than \$50,000	Refused/ Don't Know
Male	54%	45%	47%	53%	48%	41%	56%	55%	39%
Female	46%	55%	53%	47%	52%	59%	44%	45%	61%
Sample Size	179	83	134	307	159	160	216	152	72
Total Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
									Total
									49%
									51%
									600
									100%

---

# VOLUME

---

# VOLUME

# 2

micromedia

a division of IHS Canada

20 Victoria Street  
Toronto, Ontario M5C 2N8  
Tel.: (416) 362-5211  
Toll Free: 1-800-387-2689  
Fax: (416) 362-6161  
Email: [info@micromedia.on.ca](mailto:info@micromedia.on.ca)



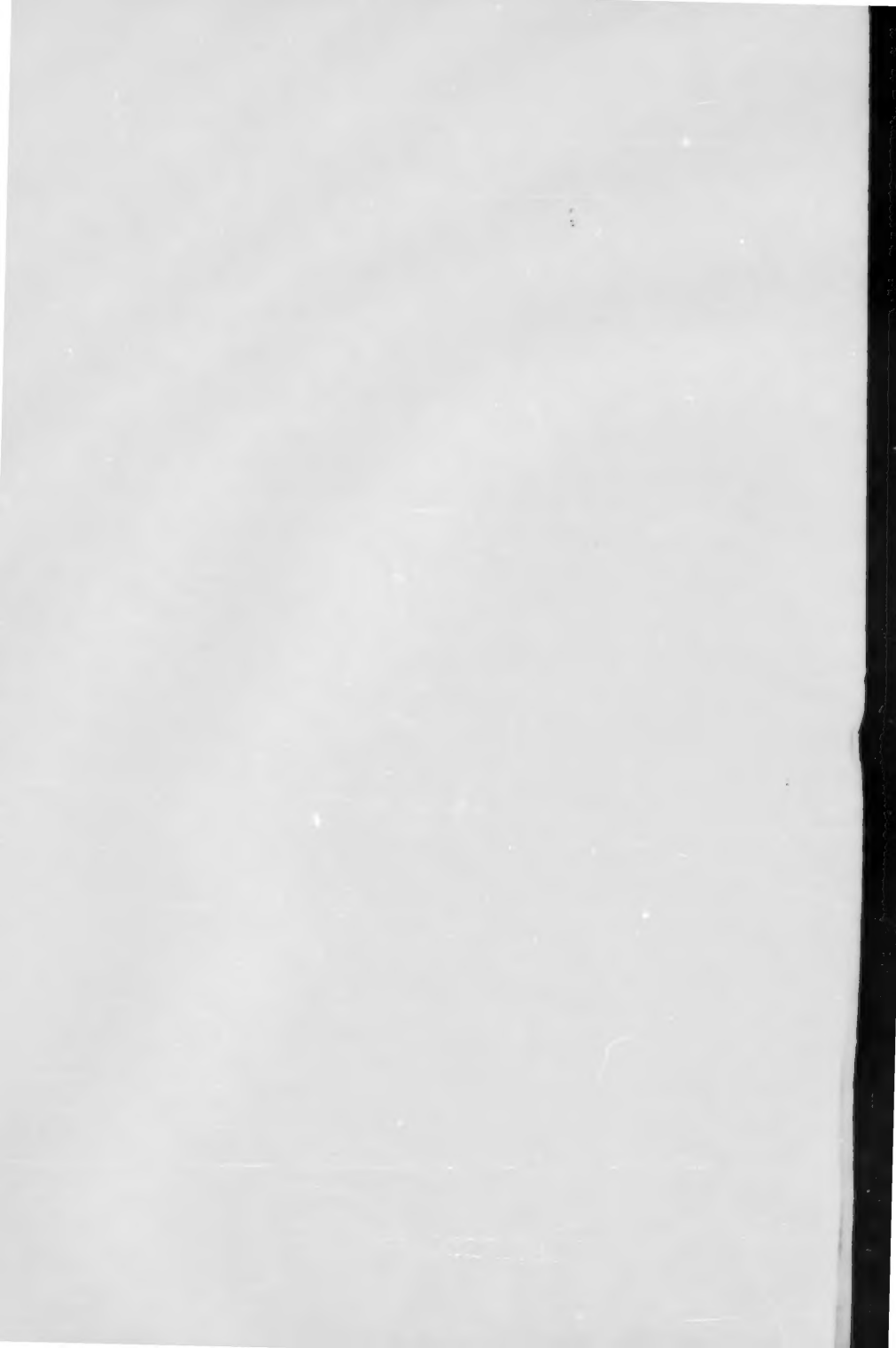
# **Annual Gaming Report 1998-1999**

**Volume II**

**Alcohol and Gaming Authority**

***Prepared for: The Honourable John Chataway***

***Minister Responsible for the  
Administration of Part II of the  
Gaming Control Act***



## **LIST OF APPENDICES**

### **APPENDIX A**

A Survey of The Prevalence and Perceptions of Gaming  
in Nova Scotia - Focal Research

### **APPENDIX B**

List of Stakeholder Interview Contacts  
Stakeholder Interview Questionnaire - Nova Scotia  
Alcohol and Gaming Authority

### **APPENDIX C**

Convenience Gaming and Social Impacts  
In Nova Scotia - MPM Gaming Research

### **APPENDIX D**

Convenience Gambling in Nova Scotia:  
A Study of Consumer Income and Expenditure  
Patterns - MPM Gaming Research

### **APPENDIX E**

Youth Gambling: An Exploration of Participation, Perceptions &  
Potential Influences - Nova Scotia Alcohol and Gaming Authority

### **APPENDIX F**

Nova Scotia VL Players' Survey 1997/98 - Focal Research

### **APPENDIX G**

Perceptions of Problematic Machine Characteristics  
and On-Line Tracking among Regular Video  
Lottery Players - Sterling Research

### **APPENDIX H**

Socioeconomic Impact of Video Lottery Terminals -  
Porter Dillon Limited

## **APPENDIX I**

Review of the Porter Dillon Study: Socioeconomic Impact  
of Video Lottery Terminals - MPM Gaming Research

## **APPENDIX J**

Monthly Video Lottery Expenditures Versus Monthly  
Expenditures for Other Gaming Activities - Focal Research

## **APPENDIX K**

National Gambling Impact Study Commission  
Final Report Review - Nova Scotia Alcohol and Gaming  
Authority

## **APPENDIX L**

Australia's Gambling Industries Draft Report Review - Nova  
Scotia Alcohol and Gaming Authority



# Appendix B



# **LIST OF STAKEHOLDER INTERVIEW CONTACTS**

1. **Addiction Rehabilitation Centre Formation Health Services,  
Halifax**
2. **Addiction Services Northern Regional Health Board, Pictou  
Site**
3. **Addiction Services Western Regional Health Board**
4. **Brain Injury Association of Nova Scotia**
5. **Choices Adolescent Treatment Programs**
6. **Compulsive and Problem Gamblers Society (Douglas  
Murphy Outreach Center)**
7. **Drug Dependency Services Central Region**
8. **Freedom Foundation of Nova Scotia**
9. **Hope Farm Society**
10. **Native Alcohol & Drug Abuse Counselling Assoc. of NS**
11. **New Vision Addiction Services Society Community  
Outreach Centre**
12. **Norman Bennett**
13. **Problem Gambling Help Line - CHC Atlantic**
14. **Recovery House**

## Stakeholder Interview Questions

Hi I am \_\_\_\_\_ and I am a researcher with the Nova Scotia Alcohol and Gaming Authority. The Authority, wants to develop a better understanding of how to help problem gamblers at a community level. We are conducting a survey to determine how problem gamblers within Nova Scotia are being served and by whom.

1. We will be talking about treatment and referral issues are you the person to be talking with?
- a. (If no) Who should I talk with?
- 

2. The questionnaire takes about XXXX do you have time to answer my questions now?
- a. (If no) Is there a better time to call back?
- 

3. In a month on average how many people typically contact you with gambling related problems? \_\_\_\_\_
- a. Of these, how many are:
- i. New contacts? \_\_\_\_\_
- ii. Continuous contacts? \_\_\_\_\_
- 

4. What criteria do you use to screen your clients?
- |                                      |                                 |
|--------------------------------------|---------------------------------|
| <input type="checkbox"/> No criteria | <input type="checkbox"/> DSM IV |
| <input type="checkbox"/> SOGS        | <input type="checkbox"/> Other  |
- 

5. Do you refer these people for counseling or provide counseling yourself? \_\_\_\_\_
- a. (If you refer) What organizations do you refer them to?
-

b. Why do you refer them to those organization?

---

6. Do you keep records of people you refer?

a. (If yes) what types of information do you gather (i.e., gender, age)?

---

7. Do you keep records of people you counsel?

---

8. When providing counseling for gambling related problems, who do you deal with most often?

☐ Problem gamblers? or

☐ The friends and family of problem gamblers?

### **Problem Gamblers**

9. How many problem gamblers do you see or council per month?

---

10. Of these, how many are:

a. New clients? \_\_\_\_\_

b. Repeats? \_\_\_\_\_

c. Receiving continuous counseling? \_\_\_\_\_

11. On average how many are:

a. Male? \_\_\_\_\_

b. Female? \_\_\_\_\_

12. What types of records do you keep on problem gamblers who you council?

---

13. Who typically refers people with gambling related problems to your organization?

---

14. When do most of your clients seek help?

- ☐ Initial winning stage
- ☐ Middle chasing stage
- ☐ Final desperation stage

15. What kind of programs do you offer problem gamblers?

---

16. Briefly describe your treatment program for problem gamblers (i.e., counseling, literature, follow ups)?

---

17. Do you provide follow up? \_\_\_\_\_

a. (If yes) How often do you follow up?

b. In what time frame? \_\_\_\_\_

18. What types of problem gambling materials do you provide clients?

---

19. Where do you obtain these materials?

---

### **Family and Friends**

9. How many friends and family members of problem gamblers do you see or council per month? \_\_\_\_\_

10. Of these, how many are:

a. New clients? \_\_\_\_\_

b. Repeats? \_\_\_\_\_

c. Receiving continuous counseling? \_\_\_\_\_

11. On average how many are:

- a. Male? \_\_\_\_\_
- b. Female? \_\_\_\_\_

12. What types of records do you keep on friends and family members of problem gamblers who you council?

---

13. How are family and friends of problem gamblers referred to your organization?

---

14. When do most of your clients seek help?

- ☐ Initial winning stage
- ☐ Middle chasing stage
- ☐ Final desperation stage

15. What kind of programs do you offer family and friends of problem gamblers?

---

16. Briefly describe your treatment program for family and friends of problem gamblers (i.e., counseling, providing literature, follow ups)?

---

17. Do you provide follow up? \_\_\_\_\_

d. (If yes) How often do you follow up?

e. In what time frame? \_\_\_\_\_

18. What types of problem gambling materials do you provide clients?

---

19. Where do you obtain these materials?

---

## **Problem Gamblers & Family and Friends**

20. How effective do you feel your treatment program is? What reasons do you have for saying that?

---

21. Do you feel there is anything that will make your programs more successful?

---

22. What per cent of problem gamblers have you treated that have displayed signs of:

☐ Alcoholism

☐ Manic Disorder

☐ Drug Dependency

☐ Psychiatric Disorders

☐ Depression

☐ Family Breakdown

---

23. Have you observed any other significant problems?

---

24. How many of your clients are you aware of that have suffered relapses after treatment?

---

25. How did you become aware of their relapse?

---

26. In your opinion, what are the indicators of problem gambling?

---

27. In your opinion, are there any common characteristic that you have noted among people you have counseled for problem gambling?

---

28. In your opinion, are there any common characteristic that you have noted among friends and families of people you have counseled for problem gambling?

---

29. What are the most common gambling problems you treat?

**Unaided**

- ☐ Bingo
- ☐ Scratch Tickets
- ☐ Lotto
- ☐ Casino Slots
- ☐ Casino Tables
- ☐ Cards
- ☐ Sports betting
- ☐ VLTs
- ☐ Track
- ☐ Stock market
- ☐ Dice

**Aided**

- ☐ Bingo
- ☐ Scratch Tickets
- ☐ Lotto
- ☐ Casino Slots
- ☐ Casino Tables
- ☐ Cards
- ☐ Sports betting
- ☐ VLTs
- ☐ Track
- ☐ Stock market
- ☐ Dice

30. Rank from most significant to least significant.

31. Are you aware of the Voluntary Exclusion Program at the Casinos? \_\_\_\_\_  
(If no) Explain.

32. What are your opinions of the Voluntary Exclusion Program?

---

33. What suggestions can you make to improve the program?

---

34. Should VLT operators adopt a voluntary exclusion program?  
Why or Why not?

---

35. Should Bingo operators adopt a voluntary exclusion program?  
Why or Why not?

---

Thank you for your time and consideration.





# Appendix C

**FINAL REPORT  
CONVENIENCE GAMING AND  
SOCIAL IMPACTS IN NOVA SCOTIA**

**PREPARED FOR  
ALCOHOL AND GAMING AUTHORITY  
Nova Scotia**

**BY  
MPM GAMING RESEARCH  
January 1999**

## **TABLE OF CONTENTS**

### **EXECUTIVE SUMMARY / 5**

### **I. INTRODUCTION / 10**

### **II. OBJECTIVES AND ACCOMPLISHMENTS / 11**

- a) Review of the Literature Sources / 11
- b) Contact with Key Researchers / 13
- c) Secondary Data Analysis / 16
- d) Focus Groups / 18
- e) Key Informant Interviews / 19
- f) Life History Interviews / 21

### **III. CONCEPTUALIZING GAMBLING IN NOVA SCOTIA / 24**

- a) The Expansion of Gambling in Canada / 24
- b) A Convenience Model of Gambling / 28
- c) Conceptualizing a Typology of Gaming Activities / 31
  - 1) Video Lottery Terminals / 36
  - 2) Casinos / 40
  - 3) Lotteries / 47
  - 4) Bingo / 52
- d) Conceptualizing a Typology of Players / 56
- e) Conceptualizing a Typology of Social Impacts / 63
  - 1) Family Impacts / 68
  - 2) Workplace Impacts / 68
  - 3) Education Impacts / 69
  - 4) Community Impacts / 70
  - 5) Governance Impacts / 75

### **IV. TOWARDS A MODEL OF CONVENIENCE GAMBLING AND ITS SOCIAL IMPACTS / 75**

- a) A Model of Social Impacts of Convenience Gambling / 76
  - 1) Bingo / 79
  - 2) Lotteries / 84
  - 3) Video Lottery Terminals / 89
  - 4) Casinos / 94

**V. APPLYING THE MODEL: PRELIMINARY EVIDENCE / 98**

- a) Family Impacts / 99
- b) Workplace Impacts / 107
- c) Education Impacts / 111
- d) Community Impacts / 114
- e) Governance Impacts / 121

**VI. RESEARCH IMPLICATIONS AND STRATEGIES / 124**

**SUGGESTED PROJECTS /128**

- 1) Study of Regulatory Regimes / 128
- 2) Estimation of Social Costs Associated with Problem Gambling / 131
- 3) Study Of Consumer Income/Expenditure Patterns And Gambling / 132
- 4) Serious Social Player Study / 134
- 5) Study of the Electronic Future of Gambling / 135
- 6) Workplace Study / 136
- 7) Study of Winners / 137
- 8) Study of Gambling Revenue by Community/Region / 138
- 9) Educational Impact Study / 139

**Endnotes / 141**

**Bibliography / 142**

## **LIST OF APPENDICES**

All appendices are available for viewing, by appointment, at the Nova Scotia Alcohol and Gaming Authority library, 40 Alderney Drive, 5<sup>th</sup> Floor, Dartmouth, N.S. Following is a complete list of those appendices.

**Appendix A: Bibliography**

**Appendix B: List of Experts and Consultants**

**Appendix C: Gambling Activities Screener - Focus Group**

**Appendix D: Gambling Discussion Outline -Focus Group**

**Appendix E: Key Informant Interview Schedule-Owner/Manager/  
Worker**

**Appendix F: Key Informant Interview Schedule-Spokespersons**

**Appendix G: Key Informant Interview Schedule-Services**

**Appendix H: List of Contacts, Gambling Impacted Services/  
Organizations**

**Appendix I: Interview Guide-Life Histories**

**Appendix J: Stirling Research Incorporated - Focus Group Report  
"Two Sides of Gaming"**

**Appendix K: Sperry Counselling and Consulting - Life History Report  
"An Ethnographic Portrayal of the Three Typologies  
of Gamers and the Gaming Impacts"**

## **I. EXECUTIVE SUMMARY**

- The goals of this project were to develop a conceptual framework for the study of the social effects of gambling in Nova Scotia and to design a research agenda based on that conceptualization.
- Research activities included compiling, reviewing, and assessing the relevant literature, collecting secondary data sources, visiting library sites, interviewing experts and key informants, conducting focus group studies and carrying out life history studies of gamblers to develop the framework and identify key research questions and methods.
- The research process led to the conclusion that a convenience model of gambling is the most suitable framework for understanding the social effects of gambling in Nova Scotia.
- The convenience model of gambling emphasizes locals rather than tourists as consumers and stresses that gambling is no longer an occasional activity or holiday experience. It has become a significant urban and rural leisure activity in its own right.
- The economic and social effects of the spread of convenience gambling are likely, therefore, to be different from those found in resort based destinations such as Las Vegas or Atlantic City.
- Convenience gambling may primarily reshuffle spending from other goods and services to the gambling industry, rather than stimulate growth.
- Because of the limited population base, there is pressure in a convenience gambling jurisdiction to try to broaden participation in gambling and increase the level of spending of the gambling public.
- Social effects which are hidden or exported out of tourist gambling economies will be more visible and enduring in communities shaped by the recent development of convenience gambling.

- The fundamental question arising out of the spread of commercialized gambling is, what is the acceptable presence and role of gambling in Nova Scotia society. How can society best manage convenience gambling to capture the benefits and control the costs?
- It is necessary to relate convenience gambling as a general framework to specific types of gaming activities and types of gamblers. Gambling is not a uniform activity and certain types of gaming and gamblers have been differentially impacted by the spread of commercialized gambling.
- There are four main types of gaming activities that are fundamental to our conceptual model for Nova Scotia: video lottery play, casinos, lotteries and bingo.
- Notwithstanding the importance of bingo and lotteries in the Province and the fact that they have been affected by the growth of commercial gaming, in our opinion the recent proliferation of video lottery terminals and the development of casino gaming are the most significant transformations in the gambling marketplace. They require careful and considered conceptualization and have the greatest public policy implications.
- Each gaming activity has particular market characteristics, regulatory frameworks and characteristics of play. These features, in turn, help shape player characteristics including demographic and psychographic profiles and intensity of gaming.
- In a convenience gambling market, positive and negative social impacts vary by type of gambling activity (i.e., bingo, lotteries, video lottery terminals, casinos) and type of gambler (occasional/recreational, serious social, problem). These variations, in turn, have differential effects which are related to income, education, age, gender, and ethnicity.
- We develop a model of the social impacts of convenience gambling which draws out the causal links between the structure of the game,

expected player characteristics and predicted social impacts and apply the model to bingo, lotteries, video lottery terminals and casinos.

- In our convenience model player characteristics associated with the features of gaming activities influence the expected social effects across the dimensions of family, workplace, education, community and governance.
- Our review of the literature, findings from the focus group research and life history studies suggest the following:
  - With regard to family impacts, the literature has a tendency to overemphasize the problem gambler, stress the negative impacts of gambling on families, and provide little information about positive benefits. Focus group and life history results suggest that gambling does have positive social effects such as stress reduction, consumer entertainment, relief from family routines, improved social interaction within family units and possible financial gain. The focus group and life history findings also confirm the negative social impacts of problem gambling on families found in the literature.
  - With regard to workplace impacts, the research is sparse and focuses on estimating the costs of the problem gambler. Occasional/recreational and serious social gamblers and their social impacts on the workplace have not been studied. Our focus group research and life history findings suggest that most people conceptualize gambling as leisure behavior distinct from work, although they recognize both positive and negative social effects which vary by the type of gaming activity and type of gambler.
  - With regard to education impacts, there is a literature on adolescent gambling, but little explicit research that looks at positive or negative impacts on education of gambling more generally. While some research emphasizes negative impacts such as poor school attendance, lack of commitment to educational goals and decreased social ambitions associated



with gambling, other studies suggest that gambling may provide positive educational impacts in that it conveys important lessons about self control, setting boundaries, taking risks responsibly and learning to cope with gain and failure. Our focus group research and life history participants emphasized the positive role of gambling in supplementing institutional resources and the negative educational impacts which can result from own or parental gambling.

- With regard to community impacts, we formulated the idea of community very broadly as (i) a local community (ii) a social group and (iii) a self defined network. Most of the literature on community impacts tends to emphasize the local community and to stress single issues such as crime, tourism, traffic congestion and the "problem" gambler. This literature also notes that there are numerous distributional issues related to community impacts. An especially important one is that in the convenience gambling marketplace a small proportion of players generate a large proportion of gambling profits and government revenues. These same players also generate a large proportion of the social costs associated with gambling, while their activities, ironically, contribute to benefits that are more broadly distributed within the community.
- With regard to community impacts, our focus group and life history results suggest that most participants saw gambling as making more of a positive contribution to the community rather than a negative one. The impacts on communities tended to be defined in economic terms and focused on benefits such as direct and indirect job creation. Gambling also provided numerous non-monetary benefits for community members in terms of opportunities to socialize, to engage in recreational activity, and to enhance community identity. The perceived community impacts varied by type of gambling and type of player, with video lottery gaming often reported as harmful while bingo was reported as beneficial. As expected problem gamblers are most associated with social costs of gambling for communities.

- With regard to governance impacts, most research tends to emphasize an economic cost-benefit approach. What is missing is a better ethnographic understanding of the social effects of gambling by type. The relationship between controlled and uncontrolled play in different games needs to be better understood. While problem gamblers generate substantially higher governance costs than occasional or serious social players, not all problem players are the same. One type of player may be "addicted" to the social world of gambling while another may be "addicted" to the game. Governments as regulators need an understanding of these differences if they are to design interventions which will minimize negative impacts.
- We propose a 'road map' of research into social impacts based on our model and the findings from our literature review and preliminary field work. These projects would enhance our understanding of causal links between the structure of gaming, player characteristics and social impacts, quantify key costs and benefits, and improve our knowledge of particular impact areas. Policy implications are at the forefront of this research agenda.
  - A Study of Regulatory Regimes to better understand the causal connection between game structures and social impacts.
  - A Study of Social Cost Associated with Problem Gambling that can derive reasonable estimates of disordered gambling.
  - A Study of Consumer Income/Expenditure Patterns and Gambling that explores the nature of convenience gambling and examines how it operates as a form of consumption for the vast majority of people who participate in gambling.

- A Serious Social Player Study to better understand the relationship between controlled and disordered gambling.
- A Study of the Electronic Future of Gambling to examine ways in which future gaming products might be delivered and regulated and the implications of each for expected player characteristics and social impacts.
- A Workplace Study designed to uncover the positive and negative social effects of gambling as experienced by employers and employees in the workplace.
- A Study of Winners to understand how winnings are used by players in each venue, how winning affects gambling behavior and how to minimize the negative impacts related to winning.
- A Study of the Gambling Revenue by Community/Region to better understand where gaming revenue is generated and how it is distributed by communities and regions, in relation to the costs incurred by communities.
- An Educational Impact Study to determine how the growth of convenience gambling is affecting young people and educational institutions.

## I INTRODUCTION

This is the final report of the research activities of MPM Gaming Research with respect to RFP number 1997-000283, *A Proposal to Establish a Comprehensive Conceptual Model of the Effects of Gaming in Nova Scotia*. It documents our activities and findings from December 1997 to December 1998. During this period, we have explored different

approaches to the study of the effects of gaming in Nova Scotia relying primarily upon the scholarly literature, advice from experts and consultants, government reports and documents, secondary statistical data, focus group information, interview data from local key informants in the service areas of justice, health, education, finance and family, interview data from local key informants who were owner/operators, managers or employees in the gaming industry, spokespersons for gambling interests or associations generally [i.e., bingo, video lottery terminals, casinos, lotteries, horse racing and charities], and life histories of occasional, social and problem gamblers. Our focus has been to review, compare and contrast, and ultimately to organize a conceptual model of gaming. Our tactic has been to deploy an open ended approach towards gathering information in order to define a set of conceptual issues and formulations.

The report is organized as follows: first, we discuss the work accomplished over the length of the project; second, we review the relevant literature and identify the key features of our conceptual framework; third, we develop a convenience model of gaming; fourth, we provide some preliminary evidence from our fieldwork; fifth, we specify a number of key research strategies based on what we have learned from our model construction; and finally, we include a series of appendices.

## **II OBJECTIVES AND ACCOMPLISHMENTS**

### **a) Review of the Literature Sources**

The first research activity was to review the considerable literature on gambling. To that end, we undertook the following: (1) data base searches; (2) bibliography searches; (3) local site visits to relevant libraries; and (4) international site visits to special gambling research centers. The primary sources used were: the Library of Congress' database; CISTI data base of keywords for post-1994 articles from 14,000 journals; Sociofile Abstracts References from 1974 to 1997; ABI INFORM a large U.S. database of 800 journals; OCLC database using casino gambling as a key word; and Lexis-Nexis database which included a search of law school reviews, encyclopedia of associations, and Canadian sources.

Second, we examined six recent annotated bibliographies on gambling. These bibliographies emphasized source materials on casino gambling, electronic video gambling, lotteries, bingo, and to a lesser degree pari-mutuel and charity gambling. A large number of the materials indexed were between 1985 and 1997 and included books, periodical articles, industry research, legal texts and briefs, government reports and publications, private consultants' studies, newspaper articles, conference papers and proceedings, and unpublished academic dissertations. These sources were especially useful in compiling information on the social and economic impacts of the gaming industry, and in helping us formulate a conceptual model to understand these impacts.

Third, we hired two library science students through the auspices of the Gorsebrook Research Institute. After we identified the relevant research materials, these researchers were tasked with the following: verifying reference accuracy; checking materials against other catalogues to ensure bibliographic correctness; searching the above mentioned databases; receiving and cataloguing research items; tracking and following up on abstract sources through Interlibrary loan and Novanet Express; entering all acquired materials into Learning End-Note Plus 2, a computer program for bibliographic references; indexing, duplicating and filing all documents, and organizing a research library. Our research assistants also compiled bibliographic references from CD ROMs, on line services, and the Internet, and created bookmarked sites in Netscape. In addition, they visited the Alcohol and Gaming Authority library and the Department of Health library in Dartmouth to consult with their librarians, cross check bibliographic sources, and acquire materials from these libraries. These site visits were especially helpful in providing us with information on: government regulations, policy and research; inter-provincial gambling activities; gaming industry behavior; social and economic impacts; and problem gambling and public health.

Fourth, Dr. McMullan and Dr. Perrier visited two international sites for purposes of gathering information about the social and economic impacts of gambling. They consulted with Susan Jarvis, Director of the Gaming Resource Center, James Dickinson Library, University of Nevada, Las Vegas and spent one day searching their special collections holdings. This Center holds one of the world's largest collection of

monographs, periodicals, books, photographs, and government reports related to gaming. Many of the gaming industry's principle journals such as the *International Wagering and Gaming Business*; *Gaming Law Review*; *Casino Player*; *Indian Gaming*; and *Journal of Gambling Studies* are located at this site. Dr. McMullan and Dr. Perrier identified key research materials retrieved materials from their special collection holdings. Altogether they procured approximately 200 research items that were not accessible elsewhere. They also traveled to the Institute for the Study of Gambling and Commercial Gaming, University of Nevada, Reno, where they interviewed Judy Cornelius, the Associate Director. This Institute sponsors major international gambling research, co-publishes the *Journal of Gambling Studies* with the National Council on Problem Gambling and publishes regular conference proceedings. Dr. McMullan and Dr. Perrier identified important books and periodicals and acquired numerous relevant documents from their collection including audio tapes of the 10<sup>th</sup> International Conference on Gambling and Risk Taking held in June 1997 in Montreal, and the 1<sup>st</sup> Conference on Gambling Policy and Practice held in February 1998 in Edmonton, Alberta.

Finally, Dr. MacDonald, Dr. McMullan and Dr. Perrier traveled to the Atlantic Lottery Corporation Center in Moncton New Brunswick. They visited the library resource center and obtained market studies, statistical reports, and survey data concerning lottery products in Atlantic Canada.

Taken together, then, database information, bibliographic searches and library site visits have resulted in the identification of key researchers, institutions and websites, the development of a data file of over 600 research items (see Appendix A), and the organization of these materials into a library.

#### **b) Contact with Key Researchers**

Our second research activity led to the development of a list of key researchers working in the field of gambling and public policy. We reviewed academic, government and industry literature, searched annotated bibliographies, and identified the major experts, institutes and consultants with specialized knowledge on social and economic issues. Our choice of experts was based on their contributions to the public policy

debates on gambling, while Institutes were chosen because of their sponsorship of major national and international conferences and because they produced current state of the art knowledge about gambling.

To date, we have identified approximately 35 experts and consultants, and 3 major centers of gambling research located in Canada, United States and Europe. The major institutes are the Institute for the Study of Gambling and Commercial Gaming, University of Nevada, Reno, the International Gaming Institute, University of Nevada, Las Vegas, and the Gaming Resource Center, University of Nevada, Las Vegas. Approximately sixty percent of the experts and consultants we identified were from the United States, thirty percent were from Canada, and the remaining ten percent were from European countries.

For purposes of interviews, we divided the experts and consultants into three distinct lists based on geographical accessibility: eastern USA, Canada, and western USA [primarily Nevada based individuals]. We interviewed ten experts and consultants in the western USA and three in western Canada (see Appendix B). Each interview lasted approximately two hours in length.

We utilized an open-ended approach with all experts and consultants we interviewed. We explored the following issues:

- how to categorize types of gamblers (i.e., occasional/recreational/social/regular/ problem/illegal) and types of gaming activities (i.e., lotteries/bingo/casino gambling/video lottery terminal gambling/social gambling);
- how to measure differences in gamblers and gambling activities (i.e., frequency of play/value of play/site of play/diversity of play/consequences of play);
- what other dimensions characterize types of gamblers (i.e., success/ advancement/ excitement/ competitiveness/ escape/addiction)?;
- what specific characteristics need to be conceptualized for each gaming activity (i.e., skill vs. chance/ passive vs. active/ moral acceptability vs. moral denunciation/ social solidarity vs. social isolation/ stress reduction vs. stress enhancement/ character building vs. character destruction/ leisure vs. professionalism/



location/availability of activity/ longevity of activity/type of wager relative to income)?;

- what features of gaming attract or distance players?;
- how are types of gaming related to different social variables (i.e., age/ gender/ class/ ethnicity/ education/ religion/ type of community [rural - urban])?;
- what patterns of variables are related to types of gaming?;
- should certain forms of gaming be studied more intensively than others (i.e., electronic forms of gambling where public policy matters are more pressing)?;
- what are the positive and negative impacts of bingo playing, video lottery gaming, lotteries, and casino gambling on family, work, community, education, and governance?;
- what kinds of indicators should be used to measure both positive and negative impacts in a conceptual model of gaming behavior?;
- are the emphases on family, work, community, education, and governance impacts the relevant ones to study?;
- is it desirable to develop an integrated model, or is it preferable to develop a multi-model approach which can then be operationalized and tested?

Our on-site visits and consultations accomplished the following: (a) an expanded list of experts; (b) the acquisition of recent unpublished studies in the field; (c) new information about current government commissions studying gambling; (d) the discovery of special collection holdings in libraries and institutes; and (e) new information about international websites on gaming and gambling.

The results of our site visits and our interviews with experts and consultants were as follows:

- social impact research is a new, important and expanding area of inquiry that has been neglected because neither corporate interests nor governments have promoted this type of research;
- gambling in Nova Scotia needs to be conceptualized differently from gambling in Las Vegas, Reno, and Atlantic City. In the case of the latter, gambling is best understood as a major tourist attraction. Most gamblers, therefore, are imported while the social problems are exported. In the case of Nova Scotia, gambling may be better



formulated around a "convenience model." Most gamblers are local residents and social benefits and problems remain in their communities;

- an important dimension of research is to compare gambling in the United States and Canada. Communities in Colorado, North Dakota, Mississippi, and Louisiana, who developed gambling for reasons such as economic development, employment, community revival, government revenues and tax relief, and tourism are highly relevant to our conceptual model;
- notwithstanding the importance of bingo, lotteries, charity gaming and horse racing, electronic forms of gambling (i.e., video lottery terminals and slot machines) should be a major focus of social impact studies because of their current public policy implications;
- given the paucity of empirical research on the social impacts of gambling, it is imperative that future research be broadened beyond studying the prevalence and characteristics of problem/pathological gambling to include occasional, and regular social gambling;
- social impact research should strive to be methodologically diverse and include studies based on quantitative, qualitative, historical, and comparative data;
- research findings should be circulated and disseminated as widely as possible to the public.

### **c) Secondary Data Analysis**

Throughout the project we collected relevant secondary data sources. We have used information found in the Annual Reports of the Nova Scotia Gaming Commission, the Atlantic Lottery Corporation, the Gaming Corporation of Nova Scotia, as well as relevant reports from other Canadian and American jurisdictions.

We hired Daphne Tucker, Manager of the Survey Center at the Gorsebrook Research Institute, Saint Mary's University, to assist us in secondary data analysis. She identified existing sources of data which measured the impacts of gaming on family, work, community, education and government by type of gambling. We also pursued information which helped us differentiate social impacts by type and by frequency of gaming, from occasional to pathological. This was not an easy task. We discovered that there were many disparate sources of information on the

impacts of gambling. However, the information tended to be incomplete and inconsistent. We explored Statistics Canada sources including the Survey of Family Expenditures, renamed the Survey of Household Spending in 1997. Their code book was reviewed and we believe that we can use data on household income and expenses to study gambling. We also investigated the Canada Alcohol and Other Drug Survey (1994), the Small Area Data Base, the Labour Force Survey (for employment data) and the General Social Survey. In addition, we have collected additional secondary data and organized it as follows:

- *criminal/legal* - (i.e., the Halifax Regional Police Service's Casino Statistical Report for 1996);
- *education/youth* - (i.e., the 1996 Student Drug Use Survey data on gambling by Nova Scotia Drug Dependency (no follow-up survey was conducted), and Department of Education reports on student gambling);
- *financial/economic* - (i.e., data provided by the Nova Scotia Bankruptcy Trustees, the Business and Consumer Services Debtor Assistance Program, the Tourism Industry Association of Nova Scotia (TIANS), and the Atlantic Lottery Corporation);
- *Social Services* - (i.e., data from the Alcohol and Gaming Authority on the Data Triangulation Project which includes Transition Houses, Addiction Services, Help Lines, Drop-in Centers, and Shelters for the Homeless); and
- *Health Services* - (i.e., the Eastern Region Drug Dependency Services 1995-96 *Report on Gambling Services* which assessed treatment programs and services for gamblers, Corporate Health Consultants 1998 *Problem Gambling Help Line Annual Narrative Report*); and the *Video Lottery Players Study 1997-1998*.

Over the course of the project we tried as well to identify secondary data sources from interviews with key informants. We found that secondary data sources needed to be modified to include gambling related social impacts. For example, client in-take records in hospitals rarely contained gambling information. Police records were not compiled to show the connection between criminal activity and gambling. Records from transition houses and shelters did not usually identify the role that gambling played in the history of abuse. Information from Employee Assistance Program counselors indicated

that gambling was often a hidden dimension of an employee's problem at work. Clearly secondary data sources conceal as much as they reveal; if they are to be used for gambling research purposes, then they require re-categorization.

#### **d) Focus Groups**

A fourth research activity utilized to develop our conceptual model involved focus group research. In April 1998, we subcontracted Sterling Research Incorporated to undertake this task. We chose this company for three reasons: (a) they have an excellent knowledge of focus group methodology; (b) they understand the substantive issues regarding social impact analysis and gambling, and (c) they have considerable experience conducting gambling related research, including studies of problem and non-problem gamblers.

Sterling Research recruited the subjects, conducted the studies, and produced transcripts and a final report. We worked closely with them on the design of the recruitment screen (see Appendix C) and the discussion guide (see Appendix D). Our conceptual approach was to work with a matrix of gaming activities (i.e., bingo, VLT, casino, lotteries), types of gamblers (i.e., occasional, regular, problem) and types of impacts (i.e., on family, community, education, workplace and governance). In designing the focus groups we wanted to explore the positive and negative social effects of gambling. In our reading of the literature we discovered that there was a strong emphasis on the problems of disordered gambling, but little information on the social effects of gambling on the majority of regular gamblers. Furthermore, general population surveys and other focus group research findings we consulted tended to report indirect hearsay information and not direct knowledge of the social effects of gambling. Respondents were often speaking of gaming activities of which they had little or no experience. There was a tendency to treat gambling as a generic activity or to isolate and focus on only one form of gambling at the expense of others.

We therefore chose to use the focus group method to explore in detail the perceived positive and negative effects of multiple gaming activities on people who regularly engaged in them. In the design of our focus groups, we selected distinct and relatively homogeneous groups based on their experience in gambling. Four focus group studies were conducted in metropolitan Halifax: one on bingo playing; one on video

lottery terminal playing; one on lottery playing; and one on casino gambling. Each focus group was composed of eight participants. We selected regular players who gambled at least once a week for a minimum of six months, and excluded those who self identified as problem gamblers. Each focus group had a gender and age mix, although the ratio tended to reflect the type of gaming activity (i.e., the bingo group had six women and two men, the VLT group had six men and two women).

Each discussion group explored the reasons for player participation. Subjects were also asked what they would do with their time and money if they could no longer gamble. Initially, focus group participants were asked to discuss a list of possible positive effects of gambling on the family, workplace, community, education and governance. Then they were asked to discuss a list of negative social effects. Subjects were asked to speak only from personal experience or about the experience of someone they knew directly. New social impacts were added to the lists by the participants as they saw fit.

The results of our focus group studies were useful in formulating our conceptual framework. These studies helped us sort out the relevant literature for model development. They also alerted us to the *scope* of positive and negative social impacts, the *institutional levels* where such impacts were likely to occur, the *social significance and ordering* of particular impacts, the *public policy implications* of impacts by type of gaming activity and the best *methodological strategies* to operationalize our conceptual model. We discuss the findings later in the final report. The focus group report entitled *Two Sides of Gaming: Perceptions of the Social Costs and Benefits of Gaming among Regular Video Lottery, Casino, Bingo, and Lottery Players* is found in Appendix J.

#### **e) Key Informant Interviews**

Throughout the project we have identified key informants in the gaming industry to help us conceptualize the impacts of gambling in Nova Scotia. We designed three sets of interview schedules and conducted numerous key informant interviews. One schedule (see Appendix E) was used for interviewing *owner/managers* directly involved in providing the following gaming services: casinos, video lottery terminals, bingos, and

lotteries. In addition, we interviewed *employees* in these gaming venues and conducted interviews with key *spokespersons* (see Appendix F) in the industry (i.e., a spokesperson for Atlantic Lottery Corporation, etc...).

The interview schedule for the *owner/managers* and *employees* focused on:

- the extent and length of their involvement in the gaming industry;
- the importance of gaming to their overall businesses;
- their client profile (age, gender, socioeconomic status, frequency of gambling);
- the observed patterns of gaming activity (regularity, length of time spent gambling, social interaction, average expenditure); and
- the positive and negative impacts of gaming on their clients.

The interview schedule for *spokespersons* focused on :

- their type of gaming and the length of time and involvement in the overall gaming industry;
- their client profile;
- the policy implications of each gaming activity (i.e., what are the social benefits and the social costs?);
- the relevant studies or reports concerning their type of gaming and clients.

The third interview schedule was used for key informants working in institutions or services affected by gaming (see Appendix G). These interviews were designed to clarify and refine our conceptual framework regarding the social impacts of gambling on the family, the workplace, the community, education and governance. To that end, we conducted interviews with representatives from the following institutions/services (see Appendix H):

- *health/addiction*: Gambling Services, Department of Health; Gambling Addiction Clinic, Nova Scotia Hospital; Problem Gambling Help Line, Corporate Health Consultants;
- *financial /economic*: private financial and debt counselor, and corporate employment assistance program counselor;
- *legal/family*: social workers, social services personnel;
- *legal/criminal justice*: Supervisor, Criminal Intelligence Unit,

Statistical Officer, Casino Unit, Halifax Regional Police Service; Casino Gambling Unit, Royal Canadian Mounted Police; Manager of Policy, Planning and Research, Nova Scotia Department of Justice;

- *education*: elementary school teacher, university counselor.

The interview schedule for key informants working in services/institutions focused on :

- the importance and growth of gambling on their respective services and organizations;
- the internal impacts of gambling on their respective services and organizations;
- the profiles of gambler clients;
- perceived social impacts of gambling by type of gambling activity;
- key policy issues identified in relation to social impacts; and
- the nature of organizational records;
- the availability of data and research, and future contacts.

These interviews were helpful in assisting us sift and sort through the theoretical, topical, and methodological issues surrounding the social impacts of gambling in Nova Scotia. They also provided us with useful data, subjects for life history/ethnographic research, ideas for measuring the social costs of gambling, indices for operationalizing research questions and directions for future research studies.

#### **f) Life History Interviews**

Our final research activity involved life history interviews and ethnographic studies of gamblers and gaming activities. In formulating this phase of the research, we compiled key bibliographical references and interviewed experts in the public health area who identified key questions and issues about normal and problem gambling and provided access to life history subjects. We concluded that a life history approach would be valuable to the formulation of our model. In particular, we thought that it would clarify a number of research questions about the rationale for gambling, the social costs of gambling and the processes of entrapment in gambling.

In September 1998, we subcontracted Sperry Counseling and Consulting to undertake the task of conducting detailed life histories on three types of gamblers: occasional/recreational, social serious and problem. We chose Sperry Counseling and Consulting for four reasons: (a) this agency specializes in the field of gambling counseling and addiction; (b) this agency has an extensive network of key gaming informants; (c) the principal researcher in this agency has considerable expertise in life history documentation, social evaluation and research design, and; (d) they have recently published a life history study of gambling in Nova Scotia.

Sperry Counseling and Consulting recruited the life history subjects, conducted the interviews, produced transcripts and wrote the final report (see Appendix K). We worked closely with them on the identification of subjects, the typology of gamblers, the life history interview guide (see Appendix I) and pre-testing the interview process. Our approach was to do interviews with occasional/recreational, serious social, and problem gamblers by type of gambling activity. In our reading of the life history literature, we discovered that there was a strong emphasis on the pathological/addictive gambler but little was known about other types of gamblers. We wanted to focus more widely on gamblers and gambling behavior which was either recreational or persistent but not problematic. The interview breakdown is as follows:

<u>Type of Gambling</u>	<u>Typology of Gambler</u>			
	<i>Occasional/Recreational</i>	<i>Serious Social</i>	<i>Problem</i>	<i>Total</i>
<i>Video Lottery Terminals</i>	1*	2	2	5
<i>Lotteries</i>	1	2	2	5
<i>Casinos</i>	1	2	2	5
<i>Bingo</i>	1	2	2	5
<i>Total</i>	4	8	8	20

\* One additional occasional/recreational video lottery player was interviewed

In designing the life history interviews, we explored gaming profiles, early life histories with gaming, attractions to and involvement with specific types of gambling, resources to gamble, self-management strategies, and the positive and negative social impacts of gambling on family, workplace, education, community and governance. We tried to



select distinct and relatively homogeneous groups based on their gaming experiences, although this was not always possible. For example, a 78 year old female player's life history involved gambling with video lottery terminals, other standard lottery products, and horses. Of the twenty-one life histories, fourteen were women, eleven lived in rural communities, seven had a university degree and ages varied from 28 to 78.

The results of our research with gamblers were helpful in reformulating and calibrating our conceptual model. These narratives provided detailed accounts of gamblers' lives. They were especially helpful in conceptualizing variables which were predictive with regard to a person's gambling behavior. To start, these life histories helped us sort out *demographic* variables, including such factors as age, gender, ethnicity, occupation, income, etc..., *situational* variables such as opportunities to gamble, history of games, appeal of the games, gambling networks, gaming regulations, etc..., *normative* variables such as the rules which classify and define the gambling event, *game designation* variables such as the equipment, conditions, odds, prior gambling experience, knowledge, records, etc..., *psychological* variables such as motives, locus of control, self-management strategies, self-image, etc..., *action* variables which involves choice of game, actual betting, and strategic play and *social reaction* variables such as approval or disapproval of significant others and management of wins or losses. These life histories also provided "thick descriptions" of positive and negative gambling impacts. Along with focus group findings, these ethnographic portrayals added enormously to the depth and specificity of our eventual model and to methodological decisions regarding its ultimate operationalisation. We discuss these findings later in the final report.

Taken together, then, our research has produced a conceptual model of the social effects of gaming in Nova Scotia and outlined research strategies derived from the model. In the first seven months of the project we compiled, reviewed and assessed the relevant literature, collected secondary data sources, interviewed experts, conducted focus group studies to calibrate many of our ideas and produced an interim report. In the latter five months of the project, we interviewed a wide sample of key informants - owner/managers, employees, spokespersons, service personnel, etc... - in the gambling sector, and conducted detailed life



histories of gamblers. In addition, we revisited and refined our initial conceptual model of convenience gambling, specified the operational indicators, and recommended a course of future research studies.

### **III CONCEPTUALIZING GAMBLING IN NOVA SCOTIA**

#### **a) The Expansion of Gambling in Canada**

Suddenly, Canadians are gambling. In less than a generation, gambling has become a major, multibillion dollar industry estimated to be worth about \$20 billion a year (National Council of Welfare, 1996:1). Before 1970, most forms of gambling were illegal, until two important amendments to the Criminal Code of Canada permitted and facilitated the expansion of gambling in Canada. In 1969, an amendment to the criminal code legitimized lotteries and casino gambling provided they were conducted by licensed charities. In 1985, provincial governments were allocated exclusive jurisdiction over lotteries, slot machines and electronic video devices by the Federal government of Canada (Campbell, 1991). With the liberalization of the Criminal Code, governments effectively transformed what was once considered an inappropriate, "sinful" behavior into a widely tolerated activity.

Most Canadians, to judge from recent participation rates, appear to gamble. According to the 1996 Family Expenditure Survey, eighty-two percent of households wagered some money on at least one gaming activity, spending an average of \$423. Government lotteries were the most popular (74%) followed by non-government lotteries and raffles (39%), casinos (17%) and bingo (12%). Average expenditures, however, were the reverse. The highest average expenditure was on bingo (\$677); the lowest on non-government lotteries and raffles (\$70). On average, households with higher incomes spent more on gambling than those with lower incomes. However, their wagering represented a smaller proportion of overall income before taxes. For example, those households with incomes of less than \$20,000 spent an annual average of \$296 on gambling, representing 2.2 percent of their total household income, while those with incomes of \$80,000 and over spent an annual average \$536, representing only 0.5 percent of their total household income (Marshall, 1998: 8).

Men living on their own were more likely than women living alone to spend money on gambling (75% compared to 69%), and on average they wagered more (\$416 compared to \$270). Men had higher participation rates than women in every gaming activity except bingo (4% compared to women's 12%). Among one person households, the lowest participation rate (62%) and the lowest average expenditure (\$245) was reported by those with a university degree. One person households with less than a high school education had the highest average expenditure (\$410) while those with a non-university certificate or diploma had the highest participation rate (79%) [Marshall, 1998:7-8].

Commercial gaming industries are among the fastest growing and most interesting industries of the late 20<sup>th</sup> century. In Canada, they comprise traditional activities such as charitable gambling and horse racing, and relatively new activities such as lotteries (which encompass gaming product such as 6/49 and super 7 draws, Keno, instant scratch tickets, sports betting), casinos (which include card games, roulette, and slot machine devices), and video lottery terminals (VLTs). A recent conservative estimate of gross gambling revenues indicates that lottery ticket sales amounts to \$5.2 billion, charitable gaming takes in close to \$5 billion, pari-mutuel betting on horse racing accounts for \$1.9 billion, and casinos and VLT wagering together totals approximately \$8 billion (National Council of Welfare, 1996:1). With a Canadian adult population (over 18 years of age) of 22.4 million and gross gambling revenues of approximately \$20 billion, Canada's per adult wagering rate is estimated at \$893.

Net revenues to governments from lotteries, casinos and video lottery terminals have increased steadily since 1970 from less than \$100 million in that year to \$1.3 billion in 1985, to almost \$5 billion in 1995. In 1985, gambling revenue made up 1.7 percent of the total money received from taxes and investments for all provincial governments; by 1995 gambling revenue had risen to 3.8 percent of the total. These substantial gains reflect the changing nature of the gambling marketplace. Up until 1991, lotteries generated almost all of the revenue. By 1995, casinos and video lottery terminals had become significant contributors of gambling revenue to provincial governments. They accounted for 38 percent of the total in that year and by 1997 the revenues from these sources had increased to account for 59 percent of the total (Marshall, 1996:39-40; 1998:8). Not

surprisingly, gambling has become an important employer in many provinces and territories. Between 1992 and 1997, gross domestic product in the gambling industry increased by 125 percent, compared with 14 percent in all other industries (Marshall, 1998: 9). According to Statistics Canada, the number of people employed in the industry quadrupled from 6,000 in 1984 to 24,297 in 1995 (Marshall, 1996:37-38). Indeed, from 1992 to 1995, the rise of employment in gambling was especially steep. It almost tripled from 12,000 to 35,000 jobs, while employment in all other industries increased by only 8 percent. In 1997 alone, employment in gambling increased by 10,000 jobs, about 4 percent of all job growth that year (Marshall, 1998:9).

The majority of workers in the gambling industry in 1997 were women (55%), persons under 35 (61%), high school graduates or less (57%), permanent workers (92%), paid employees as opposed to self employed (98%), full-time employed (77%) and unionized (28%). Males in full-time gambling jobs earned on average \$13.75 an hour while women earned \$12.87 an hour. Workers in non-gambling industries earned \$17.83 and \$14.77 an hour, respectively. The lower wages in gambling jobs reflect, in part, the lower average age and education levels of workers in the industry (Marshall, 1998:9-10).

Profits from gambling have varied from province to province. However, between 1992 and 1997 they increased in all jurisdictions. Furthermore, gambling profits as a proportion of total government revenue also increased in every province except British Columbia. In 1992, gambling profits represented less than 3 percent of total government revenue in all provinces. By 1997, half of all provinces had reached at least the 3 percent level and two provinces, Alberta and Manitoba, had surpassed 4 percent. Alberta experienced the largest percentage increase in gambling profits (414%) up from \$125 million in 1992 to \$643 million in 1997. British Columbia had the smallest percentage increase (10%) in provincial gambling profits up from \$239 million in 1992 to \$262 million in 1997, largely because it had not licensed government casinos or video lottery terminals. Among the Atlantic provinces, Nova Scotia recorded the highest profits from gambling in 1997. Their profits increased by 48 percent from \$69 million in 1992 to \$102 million in 1997. By contrast, Prince Edward Island recorded the lowest profits from gambling at \$13

million in 1997 up from \$8 million in 1992, which nevertheless was an increase of 63 percent (Marshall, 1998: 11).

For the year 1996-97, the Nova Scotia gaming wager totaled \$844,061,587, which was up 16.1 percent from \$726,751,040 in 1995-96<sup>1</sup>. Net revenue to the Province for 1996-97 amounted to \$128,220,634, which was up 9.9 percent from \$116,710,505 in 1995-96 (Alcohol and Gaming Authority, 1997:22)<sup>2</sup>. Video lottery terminals accounted for 54 percent (\$68,980,061), lotteries for 32 percent (\$41,083,000), casinos for 13 percent (\$16,379,755)<sup>3</sup> and bingo for 1 percent (\$1,294,181) of these net revenues. The Nova Scotia gaming industry now provides more revenue to the provincial government than does the corporate tax system - an estimated \$137 million compared to \$110 million (Canmac Economics Ltd., 1997a:5). With a Nova Scotia adult population of 715,990 and gross gambling revenues of approximately \$844 million in 1996-97, Nova Scotia's per adult wagering rate is estimated at \$1179. This represents 28 percent growth in wagering activity, up in value from \$600 million in 1995-96 and an increase of approximately 35 percent in the adult wagering rate up from \$760 for the same year (Smith and Azmir, 1997:5).

Casinos and video lottery terminals account for a large share of the provincial wager. In 1996-97, video lottery terminals accounted for 44 percent (\$374,332,398) of the total wager while casinos accounted for 23 percent (\$196,181,952). These two types of gaming represent 67 percent of the money legally gambled in Nova Scotia, up slightly from 62 percent in 1995-96. According to two recent economic impact studies, the full benefit of casino operations is an estimated 1,105 jobs: 657 full time equivalent jobs and a further 448 from spin-off activities, and the full benefit of video lottery terminal operations is an estimated 1,382 jobs: 887 full time equivalent jobs and another 495 from spin-off activities. The gaming industry is now significantly larger than the agriculture and fishery sectors and on a par with the tourist industry [Nova Scotia tourism receipts totaled \$905 million] (Canmac Economics Ltd., 1996:5, Appendix B; 1997a:4).

While historical information for the gaming industry as a whole is not readily available, data from the Atlantic Lottery Corporation is instructive. In a four year period from 1992 to 1996, total inter-provincial ticket sales in Nova Scotia grew by 35 percent, up from \$120.7 million

to \$163 million, while the Province's total retail sales increased by only 7.5 percent, up from \$6,371.3 million to \$6,851 million (Canmac Economics Ltd., 1996:3). Information on VLT *net* sales for the years 1992 to 1997 shows that it increased by over 500 percent, up from \$17.4 million to \$106 million (Alcohol and Gaming Authority, 1996-97:25; Marfels, 1997:339). If total sales figures were available for this gambling product and to it was added all casino sales, then the relative growth of electronic gambling sales compared to all total retail sales in the Province would be even more dramatic than these lottery ticket statistics suggest.

#### **b) A Convenience Model of Gambling**

The spread of legalized gambling and its importance to the Canadian economy has not occurred without controversy or followed traditional patterns of established gambling markets in the United States. Historically, for example, gambling operators in Las Vegas and Atlantic City attracted a high proportion of their customers from outside the areas in which they conducted their gambling businesses. They exported gaming services to residents of other regions. Destination driven gambling products and services created jobs in both resort complexes and in related areas such as hotels, restaurants, amusements, supply firms, outdoor recreation, and retail shopping. Much like a factory, they brought in new money that was spent locally on payrolls, the purchase of inputs, and the spending of the owners' profits (Grinols and Omorov, 1996:3). This occurred because, for the most part, gambling was either prohibited in adjacent regions or because the destination locales had enough tourist resources and infrastructure to draw a broad base of visitors beyond what the gaming facilities themselves attracted. In effect, gambling was separated from the population centers it depended on, and this afforded it a protection against enduring negative social consequences (Eadington, 1995b; Goodman, 1995). As Eadington (1995a:52) observes of Las Vegas:

There is even considerable dispute about the degree of severity of social problems in Las Vegas because of the omnipresent floating tourism population of about 150,000 visitors. Because Las Vegas is a city with a highly transient workforce and a rapidly growing population base, and is located in a state with limited welfare and support services, it is difficult to attribute social problems in the community to any or all of the possible causal factors (of gambling).

The development of gambling in Nova Scotia, however, followed a different pattern from that described above. Its emergence and formation emphasized locals rather than tourists as customers. Since 1989 commercial gaming has changed dramatically in Canada and the United States. Legislative permission has transformed gambling into an economy of convenience (Goodman, 1995). According to interviews with experts and data from secondary sources, gambling is becoming a significant urban and rural leisure activity in its own right. It is no longer primarily an occasional activity or a holiday experience. Almost every rural community now has corner stores selling lottery commodities and churches providing bingo, raffles, and charitable casino style gambling. Video lottery terminals can be found in many local bars, taverns, lounges and other licensed community sites such as legion halls. There are now approximately 3200 video lottery terminals located at about 600 different sites in Nova Scotia (Alcohol and Gaming Authority, 1996-97:26)<sup>4</sup>. Many provinces are promoting or building casinos, but these are casinos of expedience rather than exotic, holiday casinos. For the most part, casinos in Canada draw their customers from the local region and not from across the country or around the world. To paraphrase Eadington (1995a:53-54), these new casinos are close to their customer markets and are more accessible and more frequently utilized than distant, destination casinos. Their primary motivation is to encourage people to gamble, not to offer a vacation experience (LaFramboise, 1998).

The market structure of convenience gambling is also different from the open, competitive model that characterized the development of earlier commercial gaming in the United States. Governments are now more directly involved in the planning, administration and ownership of gaming activities. They have either formed monopolies (i.e., lottery gambling) or authorized exclusive franchise arrangements with private companies to run gaming activities as partners (i.e., casinos in Nova Scotia). Recent casino development, video lottery terminal expansion and new lottery products have also been subjected to numerous regulations and controls. These include financial guarantees to the public, constraints which try to protect gamblers from their own misfortunes (i.e., wager size limitations, advertising restraints), restrictions which limit the access to, or ambiance of the gambling activity (i.e., age restrictions, geographical constraints, mandated betting hours, prohibitions against



alcohol, food and live entertainment), rules which guarantee the integrity of the games and wagers by monitoring cheating and fraud, regulations which protect the integrity of tax collection by establishing and supervising accounting standards and practices, and procedures which watch against the involvement of unwanted people in the ownership and management of gambling services (Eadington, 1995b:174).

In addition to the legislators and regulators, other important participants in the transformation to convenience gambling include: the consumers who form the *raison d'être* for the activity and who benefit by making use of the product or service; the providers of gaming services such as provincial lottery organizations, casino operators, and card and slot machine manufacturers who exploit the economic opportunities that the market provides for them; legal, health, and social service employees who most commonly work with the troubling consequences of commercial gaming, and the general public who in one way or another have to come to terms with the fact that the legislation of gambling and its expeditious proliferation are going to have major effects - positive and negative on their culture and society (Eadington, 1994:5; 1995a:53; 1998:3; Interviews with Atlantic Lottery Corporation Managers).

The economic and social effects of convenience gambling are likely, therefore, to be different from resort based communities such as Las Vegas, Reno and Atlantic City or even urban based Canadian cities such as Windsor which attracts four fifths of its players from outside the country because of its close proximity to the American border (Smith and Hinch, 1996:41-43; Seelig and Seelig, 1998:98). In the case of readily available convenience gambling, economic impacts are not as obvious and social impacts are much greater. Regions whose gambling activities cater primarily to local residents do not have a sizable stimulating economic effect. In this sense, gambling may act as a toll house, collecting money from local residents and persons in adjoining provinces. Purchasers of such products and services may be only reshuffling the available expenditures from other goods and services to the gambling industry. Thus, jobs created and revenues generated through gambling may be offset by jobs lost and declining revenues elsewhere in the region (Goodman, 1995; Grinols and Omerov, 1996; Grinols, 1995). Relatedly, social effects which are hidden or exported out of tourist destination gambling economies are often more visible and enduring in communities

shaped by the recent spread of "high stakes at high speed gambling." As Eadington (1995b:168) notes, "the social costs linked to gambling are usually intangible, and difficult to measure." For that reason, it is imperative to ask and answer in a careful and considered way: what are the positive and negative social effects of gambling in local communities?

This brings us to the public policy issues of convenience gambling. We will likely have far more available permitted gambling in Canada in the years ahead than we have had in the preceding decades. New technologies are already pushing back the frontiers of gaming by introducing it in new forms and in new venues. Telecast pari-mutuel betting and internet wagering are but two recent examples. The fundamental question is, what is the acceptable presence and role of gambling in Nova Scotia society? Do economic impacts such as new job creation, the multiplier effects of gaming related investment and the creation of new sources of tax revenue outweigh the social costs associated with gambling? To what extent is convenience gambling a form of entertainment? What types of gamblers does convenience gambling create? What are the expenditure patterns and their displacement effects, if any, from other forms of consumer spending? Where should gambling be allowed to take place? Who should be permitted to participate? What protections should be put in place for the consumer? What monetary and non-monetary benefits do people receive from gambling? To what extent does convenience gambling trigger "problem gambling" in society? How can society best manage gambling to capture the benefits and control the costs (interviews with Dr. W. Eadington, Dr. W. Thompson, and Dr. K. Schwer)?

### **c) Conceptualizing a Typology of Gaming Activities**

In order to answer some of these questions we have tried to relate convenience gambling as a general framework to specific types of gaming activities and types of gamblers. Interviews with experts, consultants and key informants, as well as findings from our focus group and life history studies tell us that gambling is not a uniform activity. There are wide differences in skill levels, knowledge required to be a player, degrees of risk, size of wagers, pay-outs, social acceptance, and so on. Rosecrance (1988) discovered that horse racing is a highly socially oriented institution. It is an attraction and alternative to otherwise mundane lifestyles. This form of gambling allows people to forget their problems,



to shed their roles and social standing and create new ones based on their erudition of horses, track conditions, jockeys, etc... and their skills at deploying this knowledge for gain. As one of our interviewees observed, "horse racing is about community and rural values; most people who bet know the risks and they can play all night long and only lose a few dollars." William Thompson (1997:30) discovered that casinos are often used as an arena for demonstrating bravado among male players who are in an inferior position in society. For them, it seems, gambling is an outlet for expressiveness. As Thompson puts it "when the gambler wins, he can strut to the admiration of others ...." Campbell (1976) long ago argued that even slot machines are therapeutic for seniors in rest homes because it provides hopes and dreams to residents who are trapped in tiresome, lonely routines. Even though there is no skill in the game, she claims it provides them with a happier outlook on life. Card players, on the other hand, hone an intimate knowledge of card distribution and probability as well as an ability "to read" other players. These gamblers may actually gain an edge over the odds and increase their chances of a win (Rosecrance, 1988:78-90).

Gambling can also give some players a fleeting sense of self control. This, it seems, is valuable for those whose lives are highly routinized and determined by people and processes over which they have no control. Whether the person is selecting a number on a roulette wheel or making a spin on a VLT machine, the cognizance of making the play or beating the machine independently may be empowering. Even lotteries, played alone, may have some wider social benefits. The drawing of a winning number is often a publicly shared experience. The thought of a big prize stimulates optimists to seek one another out and to share dreams and plans. "Playing the game", it seems, contributes to a community discourse which might otherwise be limited to awful weather or dreadful news. "Having fun," a survey of California lottery players discovered, was the reason half of them purchased tickets in the first place (Thompson, 1997:29).

In Nova Scotia, there are currently seven forms of legalized gaming: bingo, video lottery terminals, inter-provincial tickets and lotteries, casinos, charitable lotteries and raffles, horse racing and First Nation's gaming activities<sup>5</sup>. In terms of conceptualizing a convenience model of gaming, the first four types of activities seem to us to be the most

important. Of course, horse racing and charitable lotteries and raffles have long histories reaching back to the last century. Most recently, however, pari-mutuel wagering on horse racing has declined in significance as other legal forms of gambling have expanded. In Nova Scotia, as elsewhere, horse racing has been vulnerable to virtually any and all competition from alternative forms of commercial gaming. Within the last decade, Sackville Downs in metropolitan Halifax and Tartan Downs in Sydney have either closed or reduced operations. The Truro raceway continues to be plagued by operating losses and recently has been reorganized under the auspices of the Atlantic Lottery Corporation. The Inverness raceway now operates on a seasonal basis only. Pari-mutuel wagering has had difficulty in broadening the base of its bettors. To quote one of our interviewees, "horse racing as an industry in Nova Scotia has only a few years to turn itself around." It has to become more attractive to the younger gambler. Handicapping, which involves a gradual and timely acquisition of knowledge to master the game, has been eclipsed by the new instant and de-skilled technologies of electronic gambling. From being almost "the only game in town", horse racing has become a relatively small component in the convenient commercial gaming industry (Smith and Azmier, 1997:4-5; Eadington, 1996:255-56). In 1995, for example, horse racing accounted for 1.6 percent (or \$12,460,491) of the total provincial wager of \$760,204,537 (Nova Scotia Gaming Control Commission, 1995-96:45,17-18). Indeed by 1996, a "handle" comparison with the previous year in Nova Scotia showed a 44 percent decline in pari-mutuel wagering down to \$5.7 million (International Gaming and Wagering Business, 1997:Vol. 18: (7, July). Although the future of horse racing in Atlantic Canada remains largely unknown, it should be noted that the Atlantic Lottery Corporation has recently stepped in to assist this industry.

Similarly, charitable gambling has been affected by the growth of convenience commercial gambling. In some jurisdictions it has grown in conjunction with new alternative forms of gambling. As Eadington (1996:256) notes of Minnesota " With a population of just over 4 million charitable gambling sales were approximately \$1.2 billion in 1991, with a gross gaming win of \$230 million." In Canada, the trends are mixed. A handle comparison between 1996 and 1995 reveals that charitable gambling was down slightly in Alberta, Saskatchewan, Manitoba, and Newfoundland, and up slightly in British Columbia, Prince Edward Island and Nova Scotia. There was no change in New Brunswick and

comparative information was unavailable for Ontario and Quebec (International Gaming and Wagering Business, 1997:Vol. 18: (7, July). Indeed, in Nova Scotia charitable gambling has remained a relatively stable but minor element of the gaming industry, accounting for approximately 1 percent (\$10,469,571) of the total 1997 provincial wager by activity<sup>6</sup> [\$844,061,587](Alcohol and Gaming Authority, 1997:20-21).

As more forms of commercial gaming compete in the market place and become more available to the general public, they may displace other less convenient, less exciting, less cost-effective, and less accessible types of gambling. Pari-mutuel betting and charitable gambling will likely contract because of the expansion of other competing forms of gambling and their inability to capture new players. For example, with the exception of Manitoba and Ontario, pari-mutuel handles have consistently declined and the racing industry is in considerable jeopardy in provinces such as Alberta, Newfoundland, and Nova Scotia. The survival of these two forms of gambling may depend on their ability to incorporate new authorized forms of electronic gambling into their enterprises. Such facilities become not race tracks or community centers with slot machines, but mini-casinos with racing and charitable gaming as side shows (Eadington, 1998b:10). One local gambling expert proposed that the new Halifax casino should include continuous, simulcast broadcasting of local, national and international horse races or, alternatively, regional race tracks should develop casino style games as part of their local operations.

Notwithstanding the interesting and important histories of horse racing and charitable lotteries and raffles, and their contributions to local economies, they are not especially apposite to the formulation of our convenience model of gaming and its social effects, which is based on the proliferation of new gambling products. Furthermore, First Nations' gaming, as defined by the government, encompasses lotteries, bingo, and video lottery terminals. It is not in itself, however, a separate *type* of gaming activity. Rather, First Nation's gaming refers, in the Nova Scotia context, to a *legal status* conferred on certain reserves as a result of contractual gambling agreements reached between First Nation's Peoples and the province.

This does not mean, however, that Indian gaming has not been important to the spread of commercial gambling. In the United States, the passing of the Indian Gaming Regulatory Act, in 1989, contributed enormously to the spread of casino style gambling. Major Indian casinos appeared in the states of Connecticut, Wisconsin, Michigan, Minnesota, Washington, California, Arizona and New Mexico. In some states, then, either by negotiation or through judicial action, Indian gaming was at the forefront of the proliferation of new gambling products and services in the 1990s (Eadington, et al., 1998a).

In Canada, there is no equivalent to the Indian Gaming Regulatory Act. When the Federal government, in 1985, (within the guidelines of the Criminal Code) absented itself from the business of conducting gaming enterprises, gambling became an exclusive provincial jurisdiction (Osborne and Campbell, 1989:131-132). Many First Nation's people rejected the position that they were subject to the jurisdictions of provincial governments and this led to numerous conflicts between them and federal authorities over gambling on native lands. Some First Nation bands have challenged provincial authorities that required their gaming to be licensed and regulated by provinces. Others, although committed to the principle that they are sovereign nations, have entered into discussions and agreements with provinces on matters pertaining to gaming (Thompson and Dever, 1994:27-41).

Most First Nations' gaming in the 1980s was confined to bingo and pull-tab lotteries, however, in the 1990s there were a growing number of reserves who also provided casino and video lottery gambling. Many of the negotiated agreements resulted in the spread of gambling on native lands and contributed to the convenience gambling marketplace, although they clearly had different political and cultural implications and possibly different social effects. From our perspective, First Nations' casino gambling as well as on-reserve bingo, lotteries, and electronic gambling are important *sites* in the commercialization of gambling in the province. They should be included in any study of the social effects of gambling in Nova Scotia.

We recognize, of course, that there are other ways to conceptualize the role of First Nation's gaming and that it has its own unique political history which is deserving of separate study. For our purposes, however,

it is the relationships between the convenience marketplace, structures of gaming activities and types of players which configure our model, and not the administration of provincial First Nations' jurisdictional relations. Consequently, our interviews, document analysis, focus group studies, life histories, secondary data analysis, and literature review suggests that there are four main types of gaming activities that are fundamental to our conceptual model: video lottery terminals, casinos, lotteries and bingo. Each will be located in the context of the convenience model and then discussed with regard to types of players and socioeconomic impacts.

### **1) Video Lottery Terminals**

Video lottery play is a recent, expanding and popular pastime in Nova Scotia because it offers entertainment at a low cost. It is, however, a form of gaming with a controversial past and an uncertain future. In 1991 the government of Nova Scotia made a decision to enter the video gambling arena. Already existing "gray machines" (illegal), owned by private businesses were banned and replaced with authorized, licensed video devices. Initially video gaming was permitted in corner stores, gas stations, bars, bowling alleys, and other such sites. It had high visibility and high accessibility. By April of 1993 the accessibility of this form of gaming was once again controversial, resulting in the *Kimball Report*, the *Morris Report* and the *Fogarty Report*. In the end, the government chose not to prohibit this form of gambling but instead opted to regulate it. Video lottery terminals were licensed and made available at age limited establishments. Their operators were subjected to detailed accounting, inspection, and enforcement regimes. By 1998 a moratorium on the number of video lottery terminals was instituted by the Nova Scotia government.

Video lottery machines, nevertheless, remained readily accessible. They are currently available in neighborhood bars, taverns, licensed lounges and restaurants, and service clubs. For most residents, video lottery venues are within a five minute driving radius. Play is simple, fast, and straightforward requiring little skill or pre-knowledge of the game. This allows for instant results and returns. The atmosphere of play is casual, friendly and competition consists of "beating the machine", not outwitting other players. Play, however, can be performed alone, or carried out in the company of others. It fits easily into the informal environment of enjoying a drink, meeting with friends, and just winding

down and relaxing. No dress codes prevail. Video lottery terminal play tends to be more passive than table games or bingo. Unlike card playing where concentration is required, or movie going where audience members are isolated from one another, video lottery machines actually play the numbers and facilitate either socialization activities or alternatively allow players to withdraw and interact primarily with the terminal. Play tends to be continuously available, limited only by the hours of business. Betting is low stakes, but small wagers are constantly made and they can add up to considerable expenditures when compared to other more time restricted forms of gaming such as bingo or lottery draws. Jackpot options or progressive pay-outs, however, are not normally associated with video lottery gaming.

Video lottery terminals possess some important structural characteristics: response to stimuli are predictable and set out by a predetermined computer program; concentration of hand-eye coordination is minimally required; the pace of play is negotiable to some extent by the choices of the player; incremental visual and aural rewards (i.e., electronic lights, bells and whistles, and credits) reinforce repetitive behavior; and digitally displayed scores of "winning" provide a sense of realism, drama, excitement, and the opportunity for peer group approval (Fisher and Griffiths, 1995:242-243; Smith and Azmir, 1997:2).

Video lottery players usually have a favorite locale and a favorite machine, and they play at set times on a relatively regular basis, normally once or twice a week for an average of about one and a half hours. The typical video lottery player is male, in his late twenties, with high school or vocational education, an annual income of between \$20,000 and \$29,000, and a wagering expenditure of about \$63 a month (Marfels, 1997:335-336; Alcohol and Gaming Authority, 1996-97: Appendix A, 10; Baseline Market Research, 1996:27; National Council of Welfare, 1996:6). A more refined profile of video lottery terminal gamblers in Manitoba found that nearly twice as many men as women are players, eight out of ten players are under 45 years of age, about half of all players have at least some post secondary education, the average income of players is between \$25,000 and \$29,000, and three out of every four players are employed full time (Gfellner, 1994:2-3). In Atlantic Canada, eighty two percent of video lottery players are between the ages of 19 and 44, fifty percent are employed in white, grey and blue collar jobs, forty

four percent have trade school or some university education, seventy seven percent have a household income between \$25,000 and \$60,000, fifty two percent are single, sixty one percent are male and sixty six percent are from urban locations (Grant, 1998; Sylvis ALC, personal interview, 1998). The gender differences surrounding video lottery play, however, seems to be collapsing. Wynne (1994) notes that the player profile in the future will likely include more and more working class women participants.

In Nova Scotia, a comparison of demographic profiles between video lottery gamblers and the general adult population of the province found that *regular* video lottery players were: (a) one quarter of the adult population who played VL games; (b) more likely to be male (62% vs. 48%); (c) younger, primarily under 40 years of age (61% vs. 45%); (d) less educated (high school or less: 51% vs. 43%); (e) more likely to be single (32% vs. 15%); and (f) more likely to live in multi-adult households without children (48% vs. 30%). Regular video lottery players contributed approximately 96 percent of the revenue generated from VL gambling in Nova Scotia, and problem VL gamblers, who made up 16 percent of regular players, contributed approximately 53 percent of the net revenues generated from video lottery gambling. On average, problem players each spent \$9,706.56 on an annual basis, and collectively they contributed \$62 million in revenue to the province. Regular video lottery players were also much more likely to be involved in other gaming activities. Compared to other adults for example, they were more likely to play lottery draws (61% vs. 40%); \$2.00 scratch 'n wins (36% vs. 9%); bingo in bingo halls (13% vs. 4%); and slot machines (7% vs. 1%). The average monthly expenditure of regular players on VLTs was \$243.52 and their average monthly gambling expenditure on other gambling activities, excluding VLTs, was \$75.12. Taken together, regular video lottery players spend 60 percent more than other adults in the province and allocate about 24 percent of their wagering dollars to the play of other gaming activities (Nova Scotia Department of Health, 1998:13, 6-7).

Research on the socio-economic effects of video lottery terminals, however, is sparse and inconclusive. Some research suggests that the impact of video lottery gaming is supplemental and enriches rather than redirects existing expenditures. In this formulation, the proliferation of



gambling products does not drive out local non-gambling businesses or cannibalize other gambling enterprises. Rather, multiple gaming products compete in a market of increased growth and rising discretionary consumer dollars. As Marfels (1997:333) puts it "the one dollar spent on video lottery gaming is simply *one dollar more* spent on gaming." While this argument supports the thesis that gambling is becoming more expeditious, it does not specify the degree to which video lottery gambling has tourist impacts, import substitutes or adds to the inequities of income distribution in a local population.

Notwithstanding some expected net benefits, (upward and downward linkages and job creating effects), these are likely to be modest when compared to destination resort gambling which exports the product to non-resident customers. Furthermore, because local citizens are the source of most video lottery gambling dollars, the social costs will likely reside in the community and the gambling dollars may become expensive since they will be offset by expenditures on social, health, legal services and lost productivity in the workplace (Dr. W. Eadington, personal interview, 1998; Goodman, 1995:25-26). Studies from two Australian states on the socio-economic impact of gaming machines are illustrative. McMillen (1997) notes that the introduction of video poker games resulted in new employment opportunities, improved consumer and community facilities, decentralization of revenues, and the development of a machine manufacturing sector. Less certain, however, were the social benefits and social costs of electronic gambling which she is currently studying. If research shows that the economic benefits are offset by negative impacts (i.e., decline of charities, spread of problem gambling, loss of state revenues through imports of equipment, etc...), it is likely that video poker machines will be at the center of a controversial debate. The fundamental issue will be the role of social priorities and social justice in the making of public policy (McMillen, 1997).

Indeed, there is growing speculation that video lottery gaming may be linked to addictive behavior. For most people, playing the lottery draws or bingo means going to a site, purchasing the product, and waiting until the next day to gamble again. By contrast, video lottery play is "grind gambling," a constant quick action game with a regular calculated and immediate amount of return, that encourages players to spend more money all the time they are playing. Since these VLT machines resemble



casino slot devices and are played while people socialize, the possibility exists that these new convenient 'micro casinos' may be habit forming and contribute to financial distress, job loss, family breakup, emotional health problems, and lawlessness and social disorder. A recent study by the Nova Scotia Department of Health, for example, estimates that current problem VL gamblers, past problem VL gamblers and lapsed past problem VL gamblers represent 2.8 percent, or approximately 19,000 of adults in the province. Overall, approximately 6 percent of all adults (40,800) in Nova Scotia have sought assistance and/or information for help in controlling video lottery gambling. Fully eighty-four percent of those seeking assistance eventually solicit help outside their family and kinship systems (Nova Scotia Department of Health, 1998:16, 18).

Due to the increasing impact of video lottery terminals on Nova Scotians throughout the province, Bill 17 entitled "An Act to Impose a Moratorium on Additional Video Lottery Terminals and to Provide A Study of Video Lottery Terminals" was passed on June 29, 1998. This Bill was entrusted to the Standing Committee on Community Services whose purpose was to conduct research on the social and economic effects of video lottery terminals on the province. The purpose of this research effort is to help determine the positive and negative impacts of video lottery terminals on the lives of Nova Scotians.

## **2) Casinos**

Casino play in general, and slot machine play in particular, present a somewhat different structure of gaming activity. Casinos in Nova Scotia, unlike other jurisdictions, are not government owned or run but involve partnerships with the private sector. Two casinos are operated in Nova Scotia through the government-owned Nova Scotia Gaming Corporation. The Gaming Corporation, in turn, provided Metropolitan Entertainment Group with the exclusive rights to operate casino gaming in Nova Scotia. The Metropolitan Entertainment Group was a partnership between ITT Sheraton Canada Limited and Purdy's Wharf Development Limited. The Metropolitan Entertainment Group had an operating contract with the Gaming Corporation that provided a guarantee to ensure total Provincial revenue in each of the first four years of operation would not be less than \$25 million. Credited towards this amount was the 20 percent "win tax", the registration fee paid to the Gaming Commission and any shared profits pursuant to this agreement. Originally, the Metropolitan

Entertainment Group was required to develop, finance and construct a temporary casino facility and a permanent facility in Halifax along with a permanent casino facility in Sydney.

To start, casinos are not dispersed in abundance in Nova Scotia. There are only two commercial casinos, one in the urban center of Halifax and the other in Sydney, Cape Breton, a region of the Province which attracts a steady flow of seasonal visitors. Both casinos were initially constructed in venues built for purposes other than gambling. In Halifax, a 30,000 square foot casino with approximately 650 slot machines and 40 tables opened in 1995 in the refurbished lobby area of the Halifax Sheraton Hotel. In Sydney, a 13,000 square foot casino with approximately 350 slot machines and 20 tables opened in the same year in a renovated building adjacent to Centre 200, a municipal operated sports and entertainment complex. Both these casinos share the disadvantages of historic or refurbished structures and so are limited by the physical characteristics of the facility. For example, ingress and egress constraints are not conducive to easy customer flow through the buildings, and available space for restaurants, entertainment venues, and other facilities, which are part and parcel of successful casino operations elsewhere, is non-existent (Eadington, 1995b:161-162; Smith and Hinch, 1996:42).

Furthermore, while casinos are openly accessible to local and regional populations, they often require schedule-oriented planning which, in turn, sets limits on the frequency of visits and play. They feature a more opulent structure and ambiance for gaming than do video lottery terminal sites or bingo halls (Smith and Hinch, 1996:44; Eadington, 1996:251-255; Marfels, 1997:335). As Thompson (1997) notes casinos provide self contained, crowded, party-like environments for people to meet, socialize and be entertained, which are clearly separate from ordinary life activities. In general, the atmosphere is more formal and business-like when compared to taverns, lounges and service clubs, and dress codes may apply.

Casino gaming, typically, attracts occasional/recreational players who play for periodic escapes from real life concerns and who look upon losses as entertainment costs, and serious social players who construct a social world around casino playing. For the latter, the casino is a social haven where they feel relaxed and ironically perhaps in control of their

lives. The casino environment is familiar and predictable, and regulars plan their activities accordingly. They play at set times, concentrate on particular casino games, typically associate with one another and casino employees, develop forms of money management that allow them to stay in action for long periods of time and evolve strategies of play around which they base predictive wins. Blackjack players develop counting strategies, roulette players calculate numerical sequences, baccarat players keep records of the cards that have been shown, lottery players construct mathematical formulas to predict winning combinations and slot machine players use timing devices to calibrate machine spins (Rosecrance, 1986:28-31). Casino play tends to be higher stakes than either video lottery terminal or bingo play. There are jackpot options, progressive payouts, and players gamble with bankrolls in mind (i.e., they are encouraged to maximize their bets because of jackpot options). As Rosecrance (1988:83) observes "casino gamers do not passively deliver their money into the hands of blind fate but instead actively develop means of coping with the exigencies of gaming."

With regard to the scope and diversity of play, casinos and video lottery terminal gambling are at opposite ends of the gaming continuum: casinos offer a far greater choice of electronic gaming products and, of course, extensive table games. With regard to the structural characteristics of slot machines and video lottery terminals, however, they are rather similar. Slot machines are fast, aurally and visually stimulating and rewarding, require little pre-knowledge to play, provide frequent wins, and may be played alone or with others.

Survey findings on the profile of casino players differ from province to province. In Alberta, they are most likely to be males between the ages of 18 and 45, married or in common-law relationships, middle to upper income earners, educated at a high school level or beyond, and employed (Wynne, Smith and Volberg, 1994). In Quebec, a study reported on by Gagnon (1994) found that casino patrons have the following characteristics: forty-seven percent have a high school education or less; thirty percent are students, retirees, housewives, or unemployed; thirty-five percent hold low paying blue collar jobs; forty-eight percent have household incomes of less than \$40,000 and of this group sixteen percent have household incomes of under \$20,000; and, finally, eighty-five percent of the players come from the greater Montreal area, eleven

percent come from elsewhere in the province, and only four percent come from outside the province.

Ethnographic studies suggest a somewhat different profile. A participant observation-based study of casinos in Calgary characterized the players as predominantly working class rather than middle class. Campbell and Ponting (1984:148) discovered that casino clienteles consisted mostly of non-Caucasian male players of Asian and Black origins who were mostly "rounders". Similarly, Ocean and Smith (1993:323) reported that typical Edmonton casino players were predominantly males, middle aged or older, who came from working class and minority ethnic backgrounds. Both these studies suggest that local, upper-income players preferred to gamble in casinos as tourists elsewhere in places such as Nevada or New Jersey, although it must be noted that the enabling legislation in Alberta favored "charitable" casinos rather than glitzy hotel style casinos and this may have had an impact on their clientele (Campbell, 1997a:153-154).

In Nova Scotia, casino players are almost equally male (53 percent) and female (47 percent). The average player is in his/her fifties, with an annual income of between \$25,000 and \$50,000 and a wagering expenditure of approximately \$50 a month. People who earned \$30,000 a year or less were significantly less likely to have visited a casino, let alone played at one. People who had an annual income of \$50,000 or more were more likely to have visited one of the two casinos. Furthermore, people with university education had the highest attendance rate while those with less than high school had the lowest rate (Nova Scotia Gaming Control Commission, 1995-96:110).

Card games and roulette were not the most popular games of choice in the local casinos. However, card games attracted players who were in the 25 to 54 year old age bracket, with higher levels of annual income (\$60,000 +) and a university education. By comparison, eight out of ten respondents (N=430) who gambled at casinos in Nova Scotia in 1996-97 did so on slot machines (Nova Scotia Control Commission, 1995-96:108; Alcohol and Gaming Authority, 1997: Appendix A, 7,10,77). Fully half the slot machine players were in the 19 to 24 age category while only 23 percent of players were 65 years of age or older. Slot machine player

participation rates also increased with education and income (Nova Scotia Gaming Control Commission, 1995-96:107).

Research on the socio-economic impacts of casino gambling is certainly more extensive than video lottery gambling, but findings are rather divergent. Three sets of results are noteworthy. First, there is the "miracle in the desert" finding which suggests that the Las Vegas casino industry has been an unprecedented success (Goodman, 1995:16). It has operated in a monopoly export economy, attracted its consumers from outside state borders and has been regulated carefully but narrowly. As Eadington (1996:255) puts it "Nevada has incorporated few moral positions about casino gaming into its regulatory framework." Public policy has stimulated casino growth as part and parcel of the development of the hotel, entertainment and recreational sector. The ten largest hotels in the world are now casino hotels. There are three new mega-casinos under construction in Las Vegas and two more on the drawing boards for the millennium, the largest of which will contain over 10,000 hotel rooms (Dr. K. Adams and Dr. K. Schwer, personal interviews, 1998).

As

Eadington (1995a:51-52; 1995b:180-181;1996:253-255) puts it, "there seems to be no end in sight for this casino fueled economic boom."

Secondly, the past two decades have also witnessed significant growth and change for the casino industry in Atlantic City. There is now increasing concern about the future financial security of many of these casinos. Between 1988 and 1992, six of Atlantic City's twelve casinos went through bankruptcy and one of them closed permanently. While Atlantic City casinos enjoyed an east coast monopoly until 1992, they were unable to create many new jobs for local residents, attract significant new customers to the city's declining economy or cure the fundamental problem of urban blight. They gradually over-leveraged and over-relied on debt financing for capital expansion (Eadington, 1996:254). As Goodman (1995:20) describes it, "Atlantic City became virtually two cities - one of extravagant casinos, largely manned by an outside workforce, and the other a city of boarded up buildings and a predominantly minority population that suffered massive unemployment and was given easy access to gambling."

While there were some positive multiplier effects from casino gambling in New Jersey, they were not as significant as those in Nevada. Only sixty percent of the gamblers in Atlantic City were from outside the state. This meant that there was less of an inflow of casino related capital and more reliance on re-circulating capital and resources from hotels and businesses which already existed. The spill-over effects on the larger retail market for those businesses that had no direct relationship with casinos were certainly smaller than in Nevada. Conversely, the social effects of gambling were felt to be greater in New Jersey. Bankruptcies, crime, suicide, divorce, and addiction rates were said to be on the rise and staying in the local/regional area (Goodman, 1995:22-23). At best, the Atlantic City casino industry has had mixed results and its future development may be threatened as now it must compete against the spread of other casino style gambling operations in adjoining and nearby states. As Eadington (1996:254) rightly observes "there is reason to believe that Atlantic City's slow down in growth may indeed be permanent."

Thirdly, in the last ten years many more jurisdictions in the United States and Canada have begun the process of experimenting with casinos as strategies for economic development. The pattern that has emerged involves new jurisdictions approving and promoting a wide variety of new forms of casino gaming. These casinos have been established in historic buildings, riverboats, purpose-built facilities with limited non-gaming amenities and purpose-built facilities with extensive non-gaming amenities and attractions (Eadington, 1995b:160-165). For the most part, they have been located in major urban centers that have been easily accessible to local populations or, as in the case of many native casinos, they have been developed outside of downtown centers, but close to urban populations (Eadington, 1996:165-166).

These "new casino destinations" as opposed to the "traditional tourist destination casinos" have created a whole new class of gamblers. Studies of new casinos in Canada suggest that their patrons are not people who would go to Las Vegas or Atlantic City to spend their disposable income (Smith, 1992; Gagnon, 1994; MacIsaac, 1994; Eadington, 1994). While many Canadian casinos were instituted on the rationale that they would be "tourist draws," the evidence is inconclusive. With the exceptions of the Windsor casino which attracts 85 percent of its players from outside the city and the Dawson City casino which draws 70 percent



of its clients from tourists, almost all other Canadian casinos extract their money from the local community or region (Smith and Hinch, 1996:43; Gagnon, 1994; Henriksson, 1996; Black, 1996; Seelig and Seelig, 1998).

This raises a fundamental question about Nova Scotia casinos. Marfels (1995) has argued that they are a boon for economic development and tourism in the Province. But, to date, it is not known whether the performance has fulfilled the promise. While the new casinos seem to be prospering in that they are lucrative revenue sources for the operator and the provincial government, it is not entirely clear that they are substantially boosting the local economy or that their social costs have been effectively calculated against those gains. A key question that remains to be answered is: do casinos add to, redistribute or detract money from the local economy? Do they function as "collection agencies" usurping and recycling money from both local residents and visitors or do they act as "manufactories" that accumulate capital and add value to the economy (Grinols and Omorov, 1996).

For casino development to be sustainable, the net benefits must be positive in the long run, and from this viewpoint, a convenience gambling economy may be different in its effects from those predicated on the Las Vegas model (Goodman, 1995). Who loses and who benefits matters much more in the case of the former, because the economic, familial, community, educational, and political effects remain in the local jurisdiction. While Nova Scotia casinos are virtual monopolies operating in under-supplied markets and likely to turn a profit, it is worth remembering that commercial gaming is not just a normal commodity, as are computers, furniture, or holiday packages. Gambling captures the imagination and the spirit, and can be immensely enjoyable. Yet the same activity carried out in casino settings can bring people to the brink of financial disaster and social ruin (Eadington, 1994:6). This burden, rather than rejuvenating or enriching a community, can actually create a "time-bomb" that produces even more unwanted and unexpected social, moral, and political costs (Goodman, 1995). Added to this is the problem of the spread of gambling as a "prisoner's dilemma." Suppose adjacent jurisdictions which potentially share common consumers decide to legalize casino gambling. One wins only if one legalizes casinos and the other does not. If both legalize casinos, however, both might lose. New casinos can

fall flat if the availability of facilities exceeds the demand for gambling (Thompson, 1997; Thompson and Gazel, 1997:183-205).

### **3) Lotteries**

Lotteries with big prizes got their start in Canada in the 1970s. They were created as government owned monopolies whose explicit purpose was to generate revenues for the Federal government. This lottery model was copied and improved upon by provincial and territorial governments who eventually replaced the Federal government in the market-place, in return for an annual "cut" of the proceeds equal to \$24 million in 1979 dollars (National Council of Welfare, 1996:2). Lotto Quebec was established in 1970 followed by the western provinces and the Yukon in 1974, Ontario in 1975, the Atlantic provinces in 1976, the North West Territories in 1979, and British Columbia in 1985 (Thompson, 1997:165).

By the 1990s provincial and territorial governments were offering a large variety of lottery products such as Lotto 6/49, Super 7, instant win tickets, special event and Sports Select tickets. Where introduced, lotteries were relatively popular because they were perceived as "harmless" forms of gambling (Kaplan, 1984). Gross sales before payments for prizes, in 1995, were estimated at \$5.2 billion a year, producing a net revenue for all Canadian provinces in excess of \$2.3 billion. The average annual per capita ticket sale was just over \$167 in Canada as compared to just over \$100 in the United States (Thompson, 1997:173;169). In Nova Scotia, gross lottery ticket sales before prizes were paid amounted to \$172,692,803 million. This represented 20.5 percent of all gaming wagering activity in the Province, down slightly from 21.5 percent in 1995-96, and 32 percent of net gambling revenues to the provincial government, down slightly from 35 percent in 1995-96 (Nova Scotia Gaming Control Commission, 1996:33; Alcohol and Gaming Authority, 1997:41, 43).

State lotteries have introduced more Canadians to commercial gaming than has any other form of gambling. They have had the general effect of popularizing and legitimizing commercial gaming in the minds of the general public. Lottery style gambling, as run by governments, has also been lucrative and relatively free of corruption and scandals. Because of that, many of the older negative connotations associated with other forms of gambling - such as fraud, cheating, organized crime and ruined



lives - have been revised in light of the relatively benign image of state lotteries (Eadington, 1996:249). Lifetime participation in gaming activities suggests that playing lotteries are routine activities in Nova Scotia. Fully four out of five respondents, who were surveyed in 1997, reported that they had bought Lotto 6/49 tickets and forty-one percent of them reported that they did so at least once a week. Sixty-seven percent indicated that they had played scratch-n-win tickets and nineteen percent stated that they did so on a weekly basis. This compares favourably with traditional forms of gambling such as bingo and horse racing where the rates of participation were lower at 37 and 14 percent respectively (Corporate Research Assoc. Inc., 1997:8).

The atmosphere of lottery play for most players is casual, friendly and fits easily and effortlessly into the everyday environment of enjoying a walk, going to work, shopping, and attending to the details of daily life. Lottery commodities in Nova Scotia are readily available from about 1,134 terminals located in corner stores, drug stores, shopping malls, and other retail kiosks (Alcohol and Gaming Authority, 1997:42-43). Play can be carried out alone, with family and friends, or as part of a community or work group. In most lottery games some social interaction occurs. As Rosecrance (1988:84) observes "the seemingly isolated and anonymous buyer often develops a continuing relationship with the clerk who sells the ticket and commonly talks about lottery experiences with other participants."

Most forms of lottery play require little concentration, skill, time, planning or pre-knowledge and most lottery players adopt simple, symbolic or random number selections. Players are all trying to win large prizes with relatively small investments. Since these games are aimed at mass audiences, the cost of individual involvement is generally affordable and the level of risk is low. Nova Scotians, for example, spend a monthly average of \$16 on Lotto 6/49 and \$12 on scratch-n-win tickets as opposed to \$50 on casino slot machines (Corporate Research Assoc. Inc., 1997:8,10). Unlike horse racing, sports betting or poker playing, lottery players do not usually develop elaborate game playing strategies. The majority of lottery players lives are not significantly structured by their gambling activities, although there are some regular participants for whom lottery gambling takes on an added commitment. Rosecrance (1988:85) notes that some lottery ticket players pool their money in order to buy

large blocks of tickets, associate with other lottery players in order to share and combine lottery ticket purchases, and resort to computer systems and elaborate tables or charts of random numbers to locate "hot numbers."

Lottery gaming is not inherently stimulating and what makes it attractive is the infusion of new games, higher jack-pots, and more frequent draws. Goodman (1995:147) puts it as follows "the actual chance of winning a big lottery jackpot is virtually zero" but people enjoy the "anticipatory dreaming." Lottery advertising campaigns strive to make games more socially acceptable. They emphasize both winners and potential winners who can still share in the dream of success. The typical Canadian lottery player "seems to be a person who seeing all other avenues of success closed turns to lottery as his chance of improving his lot: buying some tickets means a few bottles of beer less. But winning the big prize means a great deal " (Brenner, 1986:128).

By far the most researched aspect of lottery gaming is the economic and demographic status of the player. People who buy lottery tickets come disproportionately from low income, disadvantaged and ethnic groups, the elderly and the unemployed (Clotfelter and Cook, 1989b). Some research has found a direct negative relationship between income and lottery participation. Other research has found relationships that were positive but regressive overall, meaning that lotteries have functioned as taxes on the "poor and the gullible" (Brenner, 1986; Livernois, 1987; Clotfelter and Cook, 1989b; Brenner, 1986; Herring and Bledsoe, 1994; Goodman, 1995). A study by Marshall (1996:38-39), for example, found that families in Canada with household incomes below \$20,000 spent four times as much of their income on lottery ticket purchases than did families whose household incomes were \$60,000 or more. Thus the almost universal conclusion is that lottery revenues come disproportionately from low income people, although it must be noted that lower income groups are also over-represented among lottery winners. Brenner (1986:127), for example, found that residents of the Maritime provinces accounted for "40.5 percent of the winners (i.e., million dollar and individual) whose residents were neither Quebec nor Ontario, while their population represented only 25.6 percent of the Canadian population outside of Quebec and Ontario."

There is also some evidence that suggests that lottery participation may be related to ethnicity. Clotfelter and Cook (1989a, 1989b) discovered that Blacks and to a lesser extent Hispanic groups in the United States play lotteries more frequently than Whites. "They considered policy and numbers 'their' games"(Clotfelter and Cook, 1989a:9). Similarly, most studies that control for education have found a significant negative relationship with lottery play. The pattern seems to be the less educated the clientele the higher the participation rate. This contrasts sharply with gambling in general which shows an overall positive increase with education (Clotfelter and Cook, 1989a; Livernois, 1987). The exception in the literature is Brenner and Brenner's (1991) study in Quebec which found that the relationship between lottery play and education was positive.

Age has also been associated with lottery play, although the nature of the relationship has not been conclusively established. Some research has found a positive increasing linear relationship with the 55 to 69 year old age group, while other research has discovered participation to be highest among those from 25 to 44 years of age. Still other studies have found no significant relationship between age and play (Clotfelter and Cook, 1987; Kallick-Kaufmann, 1979; Brenner and Brenner, 1990). The relationship of gender to lottery playing has not been widely studied either, but as a rule the differences between men and women is small, although the amount wagered is definitely higher for men (Clotfelter and Cook, 1989a; Clotfelter and Cook, 1987; and Kallick-Kaufmann, 1979). Finally, a variety of contextual and attitudinal factors have also been linked to lottery participation. Kallick-Kaufmann (1979) and Herring and Bledsoe (1994) have detected a positive relationship between gambling and betting participation, arguing that association with friends, excitement, and escapism are reasons for higher participation. They have also discovered a negative association between gambling and regular church attendance. People who pray do not seem to play. Their research also concluded that the degree of lottery participation is a declining function of income and education, and that participation is higher among black, male and older populations.

In Atlantic Canada in 1998, the typical lottery ticket player was female (54%), married, aged 25 to 59, had a blue or grey collar occupation, trade school or less education, an income of lower than

\$45,000, and was located evenly in rural and urban communities (Grant, 1998:13). The demographic profiles based on lifetime participation rates of lottery gambling in Nova Scotia also suggest that this activity crosses most demographic lines. Men and women are equally likely to participate in Lotto 6/49, women (56 percent) are slightly more likely to purchase scratch-n-win products and men (76 percent) are much more likely to bet on sports events. With respect to age, participation is persistent in the years between 25 and 64 and then declines. Two out of three lottery players are married, and no relationship exists between the purchase of lotto 6/49 and scratch-n-win tickets and household income or education level. There is, however, a strong relationship between betting on sports events and age in that the participation rate for this activity decreases from twenty-two percent for those between the ages of 19 and 24 to three percent for those 65 years or older. Furthermore, a weak relationship exists between education and betting on sports events, in that the participation rate increases slightly with higher levels of education (Omnifacts Research Ltd., 1996: Appendix B, 74).

Obviously lotteries appeal to a wide range of demographic groups. A three year trend study by the Atlantic Lottery Corporation showed that the player base in Atlantic Canada has not grown despite increased sales. They conclude that the same percentage of players have been spending more money on new lottery products that have been made available. However, if the player base is to expand, it will require new strategies and new product development. Opportunities for player base and revenue growth are evident, according to the Atlantic Lottery Corporation, among those who are younger, single and are more "upscale" in terms of income, education and lifestyle as well as among those who are older and retired (Grant, 1998:5-6).

Despite their popularity, lotteries have not been free of controversy. Aside from the question of government sponsorship, there are salient issues regarding marketing techniques, market niches, and market expansion. As all forms of gambling products become more commercialized and available on a mass local basis, lottery products have had to find new ways to enhance sales growth. Perhaps the most important question for their promoters will be can they change the product mix, alter the product, and provide the players with a greater perception of value. There is much pressure on lottery commissions to fine-tune existing

markets as well as introduce new gambling activities that traditionally have not been viewed as lottery games (i.e., video lottery terminals, sports wagering, and Keno). The Atlantic Lottery Commission, for example, is interested in developing new investment game strategies with extended play and unique game mechanics, and in exploring new distribution channels such as the multi-lane grocery store which will attract new consumers (Grant, 1998:6). In consequence, lotteries are becoming a more interesting and exciting part of the convenience gambling economy. Indeed, there are plans to offer and promote traditional and innovative lottery products "on-line." The questions that remain to be answered are as follows: have lotteries peaked in the growing and diverse convenience gambling marketplace? Will electronification expand the player base? Are lotteries more damaging to society than their benign popular image suggests? What proportion of lottery players account for the bulk of lottery sales? If the proportion is small for some games, what are the social effects and how are they distributed? Relative to casino and electronic gambling, do lotteries increase value in the local economy, or do they mostly reshuffle spending?

#### **4) Bingo**

Bingo is a traditional and popular form of gambling, often associated with charitable causes. More recently, however, it has evolved into a sophisticated, high volume, competitive, commercial-based business. In Canada, provincial governments and their gaming commissions or comparable bodies now monitor much bingo play by licenses and regulations. In 1994-95, the bingo business including casino nights, raffles, and lotteries sponsored by charitable or non-profit groups was conservatively estimated to be worth \$4.5 billion (National Council of Welfare, 1996:3-4).

Bingo play is a highly dispersed activity in Canada. Literally tens of thousands of licenses are issued by provincial governments and hundreds of thousands of bingo events take place under these licenses every year. In Nova Scotia, in 1995-96, there were approximately 737 *series* and *single* bingo licenses issued, resulting in approximately 23,000 bingo events held throughout the Province. Bingo accounts for about 12 percent of the overall gaming wager activity in Nova Scotia. On average, it returns about 2 percent of revenue to the Province and about 75 percent to players in the form of prizes. For example, in 1996-97 the bingo

business, exclusive of charitable lotteries and raffles, was worth \$90,384,863, of which \$67,579,587 went to prizes, \$12,275,920 to charities, \$8,057,932 to operating expenses, \$1,581,235 to the Province of Nova Scotia, and \$890,188 to commercial entities (Alcohol and Gaming Authority, 1997:37).

Bingo is played in a variety of venues: church basements, school auditoriums, community centers, recreational settings, service clubs, public and private buildings, and commercial halls. The first commercial appearance of bingo in the United States was in the depression of the 1930s, where people played in the hope of winning food staples or money prizes (Dixey, 1996:142). Not surprisingly, bingo playing is an important recreational pastime in many working class communities. Bingo also draws substantially on rural residents. Abbott and Cramer (1993:253-254), in a study of participation in multiple gaming activities, in the United States, discovered that urban dwellers were much more likely to gamble than rural dwellers, except for bingo where the latter predominated over the former. Participation in bingo seems to be affected as well by income and education. People with lower household incomes are more frequent bingo players than are those with higher household incomes. Furthermore, people with lower incomes spend a greater proportion of family income on bingo than do those with incomes that are higher. In Nova Scotia, for instance, approximately 60 percent of residents with annual household incomes of \$20,000 or less play bingo, compared to 36 percent of residents with household incomes of \$60,000 or more (Omnifacts Research Ltd., 1996:81). Bingo participation is also inversely related to educational levels. Thirty-eight percent of bingo hall players have some university education, while fifty-nine percent of bingo hall players have less than high school education. Most bingo players are married (63%) and between the ages of 25 and 54 (71%) [Omnifacts Research Ltd., 1996:74].

The atmosphere of bingo play is serious and silent while the game is in progress, although conversations before games and after closing are frequent and lively. Much like watching a movie, bingo focuses on events external to relatively passive participants in an atmosphere of pleasant diversion and non-intimate companionship. Whilst there is a measure of skill involved in playing numerous cards simultaneously, often as many as twenty, bingo does not really require a lengthy apprenticeship in order



to understand how to play or how to win (Rosecrance, 1988:84-85). Indeed, one reason for the success of the game is that it is primarily a game of hazard (Dixey, 1987, 1996). It requires no special skill and there are few criticisms for failing to win. The absence of demonstrable skill minimizes the likelihood of conflict and jealousy, and the game can proceed in a relaxed and hospitable manner.

Bingo is a highly structured game. It is time-limited, repetitive, predictable, and routines are relished. Bingo players generally know one another by name, and adhere to particular habits, such as frequenting certain sites, sitting in particular seats, using specific markers, buying cards at set times and from certain people, and wearing special charms, jewelry and clothes. The ambiance of gambling venues varies depending on size, location, and value of prizes. At commercial venues there is more of a feeling of formality and impersonality which contrasts with local venues where bingo games occur informally, fitted around community and household tasks (Rosecrance, 1988:85; King, 1990; Dixey, 1996:145-146). Wagers are generally known and controlled. Similar amounts are spent at each game and are budgeted. Average gaming expenditures for bingo play, however, can be high. In Nova Scotia, for example, the average monthly wager is between \$65 and \$72, which is greater than the average for video lottery terminal (\$63) and casino slot machine (\$50) players (Nova Scotia Gaming Control Commission, 1996:102; Corporate Research Assoc. Inc., 1997:9-10). Winnings are, however, relatively small and irregular, and the expenses of bingo are not usually offset against the gains.

Players are thus realistic about their chances ... Players know that they are not likely to recoup their outlay. The cost is frequently compared to that of other activities, such as going to the pub (Dixey, 1996:144).

Bingo as a form of gambling is commonplace and it is a part of the constant efforts to cope with daily living. It is an unremarkable and yet beneficial activity to community life, which unlike lottery playing does not really attempt to change the balance of destiny by anticipatory dreaming. When bingo players do win, the money is usually spent to bring small comforts or gifts to their ordinary lives.

Bingo attracts a sizable number of players who are women. Newman (1972:74-75) in a study of gambling in the United Kingdom discovered that there were nearly three times as many female players as male players. Dixey (1996) in another survey found that the clientele of commercial bingo clubs was 85 percent female where bingo was the predominant activity. Similar participation rates were found in American and Canadian settings. Abbott and Cramer (1993:252) in a mid-western study of gambling attitudes and participation rates, reported that women were almost twice as likely to gamble on bingo than were men. In Nova Scotia, women accounted for 68 percent of occasional bingo players and 92 percent of weekly bingo players (Nova Scotia Department of Health, 1997:202).

Women are motivated to play bingo for a variety of reasons which include neighborliness and a night out, winning money, socializing with other women in a comfortable and familiar place, interacting with other bingo players, asserting independence and pursuing the "thrill" of the game (King, 1985:242-243; 1990; Dixey, 1987, 1996). Our life histories of bingo players reveal that recreational, serious social and problem players were attracted to the game mostly as a diversion from family and work stressors rather than for the sake of winning. For serious social players, building relationship ties and returning value to the community were significant reasons for gambling at bingo. In particular "the social world of bingo" offered a great sense of caring and belonging that allowed players to feel that they were a part of a community. Interestingly, for many players, bingo was so integral a feature of daily life that it was not even considered gambling. In contrast, men do not normally play bingo for the exposure that it offers to other bingo players, rather they play for competitive and achievement oriented purposes. King (1985:243) puts it succinctly "the frequent male bingo player is one who has all the power he needs, but is lacking in chances to get ahead."

Despite the historical, cultural and social value of bingo, it has not been free of controversy. Like other forms of charitable gambling it has typically been under-regulated, often encountering difficulties with theft, cheating, fraud, and accounting and control irregularities (Campbell, 1997b:607-620). As commercial gaming proliferates, charity gaming including bingo, will no doubt undergo organizational change. As governments develop more oversight, and more gambling products, how



will the social gambling industry respond? The benefits of bingo to a community or region could be sustained because those jurisdictions had few gambling rivals. Now that new forms of gaming have created new gamblers, will the bingo industry contract and lose its hold over its better base? Alternatively, perhaps bingo will grow as part of the expanding convenience gambling marketplace. If so, what new positive and negative social effects might arise out of a revitalized, and increasingly commercialized bingo industry?

Taken together, then, the local convenience gambling marketplace is an amalgam of many, diverse types of gaming activities that raise major ethical and policy considerations. As more forms of commercial gaming compete for what eventually may become a saturated commercialized market, a number of problems are likely to surface as a result of the interaction of economic forces and policy objectives. These include: the displacement of less attractive and less competitive forms of gambling; the relaxation of social constraints on gaming generally and casinos specifically; the relocation of gaming sites because of competition from recently authorized gaming venues which are closer to their customer markets; the politicization of opportunistic benefits linked to offering legalized gambling services to the general public; and the proliferation of potentially damaging social effects, which may not be easily rectified by a legally created commercial gaming industry, which is under increasing competitive pressures from other gaming jurisdictions, or by governments themselves who are dependent upon capturing more and more of the economic rents that their own legalization has created.

#### **d) Conceptualizing a Typology of Players**

Gamblers, in a convenience marketplace, we have argued, play under many different conditions and for many different reasons. An individual who decides to gamble, depending on his or her resources, has numerous choices to make in pursuing this activity. There is the choice of the setting, the choice within a setting, the choice of the size of the wager and wagering style, the choice of how long to play, the interaction style while gambling, expressive behaviors, reactions to winning and losing and so on. As Holtgraves (1988) observes, both pathological and non-pathological gamblers are attracted and remain committed to gambling because of the arenas that it provides for the display of character and identity and for winning money.

This has led many researchers to develop typologies of gamblers. Smith, Volberg and Wynne (1994: 238-240) and Wynne, Smith and Volberg (1994a), for example, distinguish between *uncontrolled gamblers* who start gambling at an earlier age, prefer continuous play, spend more time and money per gambling session and suffer more negative social consequences as a result of their involvement with gambling and *controlled gamblers* who gamble for socialization, entertainment, and lastly, to win money.

Walker (1992: 376, 380) proposes a more complex schema. Gambling involvement, he claims, can be regarded as the movement of people through an elaborate filter system. He advocates a socio-cognitive model of three types of gamblers: *light gamblers*; *moderate gamblers* and *heavy gamblers*. For most light gamblers, the role of gambling is incidental and relatively unimportant. Moderate gamblers, however, return again and again to the challenge that gambling presents. They become regulars and gambling becomes a significant and consuming activity in their lives. Some among them realize that the challenge is too great and they return to occasional levels of involvement. Heavy gamblers, on the other hand, are spurred on by the greater difficulty of the task of winning. Losses lead some of them to try harder and harder and no effort to gamble is too great provided that winning is eventually achieved. Some heavy gamblers eventually throw all their resources into overcoming the odds and eventually fail. They become, in his view, "pathological" or "compulsive" gamblers.

In a similar manner, Dickerson (1993: 9) distinguishes three levels of player involvement for video poker machine play: *low-medium frequency players*, *high frequency players* and *problem or excessive players*. He finds that the playing time for low-medium players averages 7.75 hours per month compared to 38 hours per month for high-problem players. Single session play expenditures range from \$2 to \$16 for low-medium players compared to \$25 to \$250 for high-problem players. Total average monthly expenditures also differ greatly varying from \$63 for low-medium players to \$1336 for high-problem players. One out of three low-medium frequency players believe that they can predict when pay-outs will occur while seven out of ten high-problem players make the same claim. Low-medium frequency players gamble "for entertainment" and "to

be sociable" while high-problem players gamble "to forget their troubles" and "to win a major pay-out."

Cook and Yale (1994:18-20), using a market perspective combined with diffusion theory, develop an interesting typology based upon the proliferation of gaming locations. They argue that the development of new games and expanding venues has given rise to several new types of gaming segments which they classify as *high rollers*, *day trippers*, *low stakes/new adopters*, and *family vacationers*. High rollers, they claim, are sophisticated gamblers who tend to be wealthy, older, and male. They play traditional games of chance and rely more on skill than luck. Day trippers are increasingly retirees who gamble intermittently, but intensely, at sites which are easy and convenient to access. They wager significant amounts per gambling session, and tend to play electronic gaming options. Low stakes/new adopters are recent converts to gaming. They play locally and relatively infrequently, usually as an evening or a day diversion. Linked to the aging baby boomer generation with time and money, these gamblers enjoy the entertainment value associated with new gaming products. Many gamblers of this type are women who play slots and other video gaming devices. Family vacationers are those gamblers who have arisen as part and parcel of the development of "complimentary tourism attractions", such as theme parks. They gamble when they holiday as a family, utilizing a wide spectrum of products and amenities in the gambling destinations that they have chosen for recreation and entertainment.

Custer and Milt (1985:24-46) develop a six fold typology of gamblers based on social characteristics: *the professional gambler*, *the anti-social/illegal gambler*, *the casual social gambler*, *the serious social gambler*, *"the relief and escape" gambler* and *the compulsive gambler*. For them, the first two types represent a very small proportion of the gambling population. Far more important are the other four types. For the casual social gambler, gambling is an incidental pastime, one recreational activity among many others. For the serious social gambler, gambling is a major source of relaxation, entertainment, pleasure, excitement and diversion. It is undertaken, moreover, with great absorption and intensity. For the relief and escape gambler, gambling is also much more than a pastime. It is an activity that is used to find relief from anxiety, tension, and depression. This type of gambler finds gambling to be of equal

importance with and sometimes of greater importance than commitment to family and work, yet the gambling does not seriously invade these areas and undermine them. For the compulsive gambler, gambling is the only thing in life. The player is driven by overpowering and uncontrollable impulses which persist and progress in intensity and urgency, consuming more and more of their time, energy, material goods, and emotional resources until, ultimately, it attacks, subverts and often destroys family life, ethical values, social status, employment security and physical and psychological health.

Finally, Abt, McGurrin and Smith (1985) advocate a synoptic model which integrates structural and dramaturgical sociology with principles of cognitive psychology. This model emphasizes that many forms of gambling are normative rather than psycho-pathological. By conceptually connecting macro-level *status variables* (i.e., socioeconomic status, sex, age, ethnicity, education, disposable time and income, etc...), *situational variables* (i.e., opportunities to gamble, gambling networks, attractive games, etc...), *contextual variables* (i.e., culture of gambling in an area, gaming regulations, etc...), *social transformation rules* that define the gambling event and *gambling event variables* (i.e., equipment, odds, other players, conditions, rules, win records, etc...) with micro-level *psychological variables and transformation rules*, such as self image, control, gaming experience, personality traits, etc..., *gambling action variables* which include type of game, wagering and playing the game and *social feedback signal variables*, such as approval or censure by important others, wins and losses, and perceived costs and benefits of gambling, Abt, McGurrin and Smith (1985:80-81) produce a five fold construct of player types. Normal types of gamblers include: *occasional gamblers* who have a transitory interest in gambling and who take low risks; *recreational gamblers* who know the games and the odds, have a moderate interest in playing them, possess the discretionary income to wager and expect monetary returns; *serious gamblers* who have an abiding interest in playing games that they know well in the quest for monetary rewards; and, *professional gamblers* who play continuously and depend on gambling rewards for part or all of their livelihood. In addition, an abnormal type of gambler who loses control over the game and for whom the action assumes more importance than any real monetary gain or loss also exists. This type of *pathological gambler* continues to play, chasing losses with no apparent concern for either the social

consequences of their gambling or the negative social reactions of others to their addiction.

These typologies, then, try to integrate players into contexts and, in turn, show how these contexts provide gamblers with cultural texts or rationales for their own construction of gambling realities. In conceptualizing our model, we initially developed a four fold schema that included the *occasional gambler*, the *recreational gambler*, the *illegal gambler*, and the *problem/pathological gambler*. Our interviews with experts, local key informants and gamblers, and our own substantial literature review, however, have convinced us that this schema requires modification. While there is merit to conceptualizing a type of gambler that is illegal and possibly anti-social, this type of gambler, who is usually involved in "crooked" gambling, seems to have declined somewhat as legal regulation has increased. In Nova Scotia their numbers appear small, although it should be noted that elsewhere both legal and illegal gambling have expanded<sup>7</sup>. Similarly, professional gamblers who have mastered the game and are dependent on it for their economic livelihood are also few in numbers. In Nova Scotia, there are limited opportunities for full-time gamblers to participate in pari-mutuel betting, illegal high stakes games, or in "working the edge" against the house at the Province's two casinos. For these reasons, we did not include them in our original typology, nor do we see a need to include them at this stage of the research. Relatedly, our original distinction between the occasional and the recreational gambler appears with hindsight to have been too exacting. Our key informants, experts, and gamblers themselves, insist that the overlaps between the two types are far more significant than the incidental differences. The emergence of new gaming segments and expanded gaming convenience convinces us that casual, occasional and recreational gamers have developed into a broad cross-section of the population that is accustomed to and enjoys playing easy to learn games such as lotteries, bingo, slot machines and other electronic devices. Hence these new entrants (i.e., low/stakes new adopters, family vacationers, etc...) into gaming are best conceptualized as a single type. Finally, our initial typology failed to properly account for what many experts have called the serious social gambler who plays with consistency, cognizance, conviction, and commitment without causing social ruin. This oversight will be corrected below.

For the purpose of our model, we conclude that gamblers can best be distinguished as follows: (a) *the occasional/recreational gambler*: those who have a passing to moderate interest in gaming, court the games as a form of recreation, entertainment, sociability and possibly distraction; play at irregular intervals and for limited sessions of time in a controlled manner, risk minimal to moderate amounts of money, possess some knowledge of the skills and odds involved in playing and anticipate realistic rewards for their involvement. Gambling fills a need in life but it is not one that other activities, such as sports events, movies, the theater or family outings could not and do not just as easily satisfy.

(b) *the serious social gambler*: those who have a moderate to heavy interest in gaming and court the games not only as a source of entertainment, relaxation or pleasure, but as a major preoccupation in their lives. They play at regular and predictable intervals, usually for lengthy sessions of time in a structured and competent manner. The money that is allotted for and spent on gambling is normally much more than what *recreational gamblers* wager, but is well within the serious player's means. Winning is as important for the presentation of self as it is for the money. Social gamblers are prepared to lose, hoping that in the long run they will come out ahead. "Excitement," "action" and the "thrill" of betting, as much as the anticipation of winning or the relief and escape from anxiety or tension, are what attracts and holds the serious social gambler to their games. Serious gamblers know well the rules, strategies, etiquette and odds of the games they play in their quest for economic rewards. For serious social gamblers, gambling is an absorbing and major form of entertainment. Yet it is controlled and does not normally intrude into other social domains or prevent new social interests from developing.

(c) *the problem gambler*: those for whom gaming as an activity has become heavy, excessive, potentially dangerous and results in weighty financial losses. The term "problem gambler" refers to "high frequency gambling" involving relatively large sums of money, "excessive gambling," where the gambler acknowledges that gambling is disrupting his/her everyday social experiences, and "pathological gambling" which is the medicalization of gambling as an addiction or compulsion as is done explicitly within the DSM-III-R, DSM IV (Walker, 1997:224).

For most problem gamblers the action of the game has assumed more importance than any real entertainment value or monetary significance. While problem gamblers are deeply committed to gambling, play



relatively continuously, wager larger sums of money, believe that they can calculate the probability of pay-outs, and think that winning is just around the corner, the basic distinction between them and other types of players is the question of control (Lorenz, 1998; Abt, McGurrian and Smith, 1985; Smith, Volberg and Wynne, 1994; Walker, 1992). As Abt, McGurrian and Smith (1985:81) observe "Even the serious or professional gamblers maintain control over the game, insofar as it is possible, and their bankroll."

High frequency and excessive gamblers have difficulty controlling their gambling expenditures. They are not yet emotionally dependent on gambling, but they are harmfully involved in it, either because they crave "the rush" or because gambling has become a sanctuary from boredom, loneliness, work and social anxieties. They have a vestige of control over their gambling but they are gambling longer, with more money than planned, and finding it harder and harder to set limits on time and spending. They are at an early sequential stage, moving along a continuum of gambling use which, if left unchecked, could result in chasing, dissociation, blackouts and withdrawal (Bennett and Sperry, 1998: 69-73; Smith, Volberg and Wynne, 1994:238-242). Pathological gamblers, for their part, are further along the gambling continuum. They continue to play, trying endlessly to recoup their losses with no apparent regard for the consequences, such as financial ruin, reduced productivity, disruptive family life, reduction of previous interests and leisure activities and possible involvement in illegal projects (Lorenz, 1998; Bennett and Sperry, 1998:69-70). Even when not gambling, the pathological gambler is often preoccupied with thoughts about gambling. Their behavior has become compulsive and addictive, driven by overpowering and uncontrollable cravings and impulses to gamble. As Lesieur (1992:43) puts it "pathological gambling is chronic and progressive," and is not unlike other addictions involving alcohol and other drugs.

### **e) Conceptualizing a Typology of Social Impacts**

Just as there are diverse typologies of players, so too there are many types of studies which shed light on the social effects of gambling. These are distinct from the strictly economic studies which evaluate gambling as a revenue source (i.e., taxation studies) or which conduct impact analysis based solely on indicators of generated economic activity (i.e., expenditures, jobs, multiplier effects, etc....). Of course, these indicators contribute to the positive social effects of gambling, but there are other social impacts which tend to be overlooked by a limited economic analysis. The literature on social impacts, however, tends to focus on problem/pathological gambling (however defined) and its costs, ignoring both the positive and negative impacts of occasional/recreational and serious social gambling. Our review of the social impact literature, therefore, will be broad and focus on gambling and its social effects in the wider political, economic and cultural contexts.

Some attempts have been made to estimate the macro social costs of gambling. Two studies are especially pertinent to our research agenda: one carried out in the U.S.A. by Thompson, Gazela and Rickman (1997), and a second conducted in Canada by Cyrenne (1995). Cyrenne's study adopts the methodology of cost-benefit analysis and takes account of opportunity costs and externalities. His analysis of benefits includes revenues to government and private operators and consumer benefits. His analysis of social cost includes lost revenue to charities and other businesses due to substitution, and losses from problem/pathological gamblers. Cyrenne's method for estimating the latter is similar to that of Thompson et al. Both use estimates of the number of problem gamblers from prevalence studies and multiply these numbers by estimates of the costs per problem gambler, such as lost income, health treatment costs, money taken from family necessities, bad debts, criminal justice and welfare costs. Thompson's estimate of the cost per problem gambler in Wisconsin is almost \$6,000 (U.S.) while Cyrenne's figure for Manitoba approximates \$14,000 (cdn).

These and a similar study by Lesieur (1997), for example, have developed creative ways to estimate the aggregate costs associated with problem gambling (as measured by prevalence studies). However, there is debate about the validity of the estimates and about what should or



should not be counted as a social cost. Costs, for example, tend to be measured rather narrowly in dollar terms and they ignore social issues such as time costs. Job loss counts as a social cost, but time away from care-giving by a housewife does not! Furthermore, the focus of these studies is on the "bottomed-out gambler" and the "bottom line" cost figure. Issues about the distribution of costs and benefits from one income class to another, from rural to urban, and from private to public are not adequately conceptualized or measured. Finally, these studies do not normally take account of the positive social effects of gambling.

A second set of studies examines social impacts in community contexts. Usually this research follows the introduction of new gaming activities and markets in local economies. Some studies tend to focus on tourism-related benefits and costs and so are generally less relevant to a convenience gambling setting such as Nova Scotia (Ewart, 1997). However studies of communities where electronic gambling has been introduced as an economic development strategy, such as in North Dakota, Colorado, Iowa and Mississippi and on certain Native reserves, are directly relevant to our conceptual model because they too have developed gambling as part and parcel of a convenience marketplace (Stokowski, 1996). These regions confront many of the same social impacts and this body of research are useful in formulating research strategies. Local community based studies, for example, have used a wide range of methodologies, including quantitative estimates of costs and benefits modeled on the macro studies mentioned above (Anders, 1997), surveys of resident satisfaction with gambling products, services and their social and environmental consequences (Long and Kang, 1997) and in-depth qualitative research on the economic, cultural, social, and ideological transformations that gambling has brought to community life (Stokowski, 1996).

A third, somewhat heterogeneous, set of social impact studies focuses on particular demographic groups (i.e., women, adolescents, elderly), specific gaming activities (i.e., casinos, lotteries, bingo) and special institutional areas (i.e., workplace, family, criminal justice, etc....). These studies are especially helpful because they provide precise details that are often missing from the macro studies. Their emphasis tends to be on individuals, their behavior and the risk factors associated with gambling.

In terms of demographic studies, there is a large literature on adolescent gambling, which looks at prevalence rates and at motivations to gamble, such as the influence of parental gambling and the accessibility of gambling products (Shaffer, Hall and Bilt, 1997; Browne and Brown, 1994; Arcuri, Lester and Smith, 1985; Fisher, 1993a; Govoni, Rupcich and Frisch, 1996; Yorke, 1995; Ladouceur and Mireault, 1988; Griffiths, 1989; Buchta, 1995). Typically, these studies show that adolescents have higher rates of problem gambling than adults (especially for males), and play different games than adults (Shaffer, Hall and Bilt, 1997; National Council of Welfare, 1996). This research, while noting possible impacts on truancy, theft, and drug/alcohol abuse, nevertheless, does not document their scope or rates over time. It also says little about possible positive benefits deriving from gambling.

While surveys are the most common methodology in adolescent based gambling research, ethnographic studies such as Fisher's (1993a, 1993b; 1994), Griffiths' (1990) and Fisher and Griffiths' (1995) work on electronic video gambling and youthful gambling are especially important because they provide a more sophisticated understanding of the culture of gaming and its social meaning and impact for adolescents. This participation observation based research, while not excluding the addicted adolescent, has found that juvenile electronic arcade gambling is motivated by a diversity of social reasons: ego enhancement, technical problem solving and the development of skill, gender exploration, excitement and thrill, temporary escapes from reality and the desire for peer group social interaction. By emphasizing the multidimensional nature of electronic 'fruit machine' gambling among young people, Fisher and Griffiths reveal many of the social processes surrounding the process of 'addiction'. They demonstrate how the 'problem' gambler is a fluid concept dependent upon normal social processes and contingencies. Their naturalistic approach, which can be combined with survey methods, offers a promising perspective for social researchers to explore the growing, diverse social effects that convenience gambling seems to have on children and teenagers.

The recent literature on women and gambling points to the differences between men and women on issues such as, motivation to gamble, amount of time spent gambling, size of wager, types of games played and the extent of problem gambling, and documents the

dimensions of the emerging trend toward more female gamblers and more female problem gamblers (Ohtsuka, et al., 1997; Wynne, 1995). Most prevalence studies, for example, reveal a higher rate of problem gambling among males rather than females (Shaffer, Hall and Bilt, 1997). Evidence, however, from recent Canadian studies in Alberta and Nova Scotia, which looked at multiple gaming activities, found that problem gamblers are just as likely to be female as male (National Council of Welfare, 1996). Gender differences in prevalence rates seem to reflect differences in their rate of play and in types of gaming activities. Studies which focused on only one type of gaming activity also found comparable problem gambling rates by gender (Saskatchewan Health, 1994). Notwithstanding the importance of this research, there is, nevertheless, little information on how the social impacts of gambling vary between men and women. Are treatment costs different? How does gambling effect job loss by gender? Do debt levels differ between men and women gamblers? While some answers to these and other important social impact questions may be inferred from existing data on gambling expenditure patterns (i.e., the lower amounts spent by women problem gamblers), and on different patterns of play between men and women (i.e., women typically play bingo and view gambling as contributing to worthy causes), there is little empirical research which clearly demarcates the social consequences of gambling by gender.

Specialized impact studies also include a considerable amount of research on gambling and family impacts, gambling and crime, gambling and debt, gambling and workplace, and gambling and health. We review this research later in our discussion of the typology of social impacts. Three caveats, however, are noteworthy. First, the coverage of social impacts is extremely uneven. Many more studies concentrate on the crime connection, for example, than on workplace impacts. Second, many of the studies focus on the problem gambler and highlight the negative social impacts and not the positive ones. Third, many of the studies are limited and discrete, and reveal only partial perspectives about the social impacts of gambling.

A final collection of social impact studies emphasizes a general analysis of culture and society, and focuses on the ways that wider socio-economic changes are related to increases in gambling either as causes or effects. Thus, in this type of analysis social costs are less attached to

individuals as 'problems' and much more likely to be viewed as associated with broader cultural and structural shifts. For example, gambling is understood to be but one manifestation of consumerism - another product of an expanding service economy. From this perspective, gambling is interpreted as positive or negative - either because it meets consumer demands for more entertainment products, or because it symbolizes a debased quality of life associated with meaningless consumerism. Political economy studies emphasize the role that heightened alienation and economic insecurity play in contributing to the spread of gambling commodities - chasing the dream of the good life, which has become less attainable in the current economic context. Governments, too, are seen in this perspective as acting out of desperation, responding to economic restructuring and their own fiscal crisis by promoting gambling as a solution to their revenue problems (McMillen, 1996; Abt, 1996; Goodman, 1995; Black, 1996). Other studies relate the social impacts of gambling to the political economy of regulation, emphasizing the transition from vice to tolerance, or connecting the social effects of gaming to a medical model in which gambling is seen as a potentially addictive behavior not unlike alcohol or substance abuse (Dombrink, 1996; Custer and Milt, 1985; Jacobs, 1986). These latter studies are not without their critics. Walker (1996a), for example, is especially dubious of the addiction approach and the tendency to medicalize gambling.

The political economy/culture literature suggests that it is not sufficient to simply "track" the social effects of gambling at the level of individual prevalence or as itemized costs per problem gambler. Broader conceptualizations of social impacts - both positive and negative - which may be less amenable to measurement, must be formulated and operationalized.

Building on this diverse and inconsistent literature, we have developed a typology which orders and summarizes the potential positive and negative effects of gambling using the categories of *family, work, education, community and governance*. What follows is a summation of the key findings from the literature.

### **1) Family Impacts**

With regard to family impacts much of literature focuses on problem gamblers and stresses the negative impacts of gambling on family life. Financial distress is the most obvious negative impact, where money is taken from necessities to gamble and then debts mount up. Relations between spouses may also deteriorate as a result of arguments over money, loss of trust between partners and family members and abusive or violent behavior. In the extreme, gambling may lead to financial ruin for the family and separation or/and divorce. Some studies direct attention to the impact that gambling is having on the mental health of spouses, children, and gamblers (Sibbald, 1997). Others demonstrate that the rates of adolescent gambling are positively related to parental gambling in the family context (Lesieur and Rothschild, 1989).

This literature has a tendency to overemphasize the problem gambler and provides little comparative information about whether these negative family impacts are experienced by recreational or serious social gamblers. One interesting exception is a study which compared gamblers and non-gamblers and found that the former had higher rates of credit card debt than did the latter (Hira, Monson and Ingram, 1997). Furthermore, the existing research pays little attention to less quantifiable negative family impacts, such as the time that gambling takes away from the family. Positive impacts on the family also receive little attention in the literature, although impacts of this sort may be inferred from research which has investigated motivations to gamble (i.e., loneliness, boredom, excitement, entertainment, etc...). Possible positive impacts that gambling may have on the family include: stress reduction, improved social interaction, escapes from routines, and possible financial gain.

### **2) Workplace Impacts**

Compared to family impacts there has been very little research on the workplace impacts of gambling. Some social cost studies have tried to estimate employment loss among problem gamblers and still other research has estimated the cost of lateness, thefts from employers and absenteeism caused by problem gamblers (National Council of Welfare, 1996:34). But there is a startling absence of research involving recreational and social serious gamblers and the social impacts of their gambling in the

workplace. As Lesieur (1992) observes there is a lack of recognition that gambling is a problem for the workplace, and Employee Assistance Programs (EAP) do not easily detect problem gamblers, because gambling is often concealed in a complex of other social problems such as marital discord or financial distress.

Lesieur (1989) suggests that little is known about the rates of gambling in different work settings. Do specific industries, organizations or occupations have higher gambling rates than others? Are these related to job stress, boredom, lack of control, access to funds (company credit cards), opportunities to be out of the office (sales staff), proximity to gambling venues, etc....? What workplace practices are effective in promoting responsible gambling and detecting problem gambling? The literature on these and other important questions about gambling and work is sparse and relatively silent.

### **3) Education Impacts**

The social impacts of gambling on educational processes and institutions have received some attention in the literature, but mostly through the research devoted to gambling and adolescents. As mentioned earlier, studies have consistently shown higher participation rates and problem gambling rates among adolescents as compared to adults (National Council of Welfare, 1996; Shaffer, Hall and Bilt, 1997). This research has found that adolescent gamblers skip school, miss work, and borrow money from family and friends to gamble, although the surveys record low incidence rates for these behaviors (Lesieur and Klein, 1987). For example, Ladouceur and Mireault (1988) in a Quebec city survey found that only 5.4 percent of high school students admitted that they cut classes to gamble. The research also emphasizes the value of educating adolescents about the responsibilities and dangers of gambling, not unlike sex and drug education. Indeed, as gambling proliferates and becomes more accessible and socially acceptable, the perception is that the young need to be taught to enjoy its benefits and minimize its harm.

There is, however, little explicit research conducted on positive or negative educational impacts. Some studies have examined the impact of lottery revenues on state funding of education and found that gambling revenues ear-marked in this way have not significantly increased educational funding (Jones, 1997; Dense, 1997). Other studies suggest

that gambling play may provide positive educational impacts for individuals in that it teaches them transferable skills that can be used in everyday life. Abt and Smith (1983), Abt et. al. (1984) and Abt and McGurrian (1989), for example, suggest that gambling conveys important lessons about self-control, setting boundaries, taking risks responsibility and managing gains and losses. For them, gambling is normalized behavior and not pathological. On the other hand, gambling can impact negatively on school attendance, academic performance, social ambitions and behavior in the classroom. In studying educational impacts, it is especially important to investigate how the use of time and money for gambling purposes affects academic achievement, educational commitment and long term career prospects.

#### **4) Community Impacts**

In conceptualizing how gambling impacts on the community, we have formulated the idea of "community" very broadly. It may be conceived first at the level of the *local* community. Here there may be social costs such as crime, environmental decline, and the erosion of social service agencies, and benefits like better entertainment options, funds for community services, recreation and sports, and jobs (Smith, 1987; Minister's Advisory Committee on the Social Impacts of Gaming, 1994). Community may also be defined as a *social group*. For example, a parish group whose revenues and social bonds are strengthened by weekly bingo games, or a seniors club which uses gaming as a strategy to augment its resources and to plan its social activities. In addition, community may be *self-defined* by individuals as a social network.

As a shared leisure activity, gaming may create, sustain, and add meaning to social relationships or, in extreme cases, it may disrupt social interaction, isolating individuals from social networks. For regular horse race gamblers, sports bettors, poker players, casino gamers and even lottery ticket purchasers, gambling is a social world in which the following typical process occurs: (a) the stimulations of gambling are discovered; (b) some financial reward is realized, thus reinforcing stimulation and encouraging commitment to the game; (c) the gambling world becomes increasingly known, friendly and secure, even though there is decreasing stimulation usually in the form of loss of money; (d) social relationships around gambling form within the social world; (e)



with only gamblers; (f) primary and increasingly important gambling relationships can be maintained only through continued gaming activities; and (f) gambling participation reproduces a social world (Rosecrance, 1988:86). Of course, not all players follow this progression: some especially recreational gamblers never move beyond an early level of commitment while others, especially addicted gamblers, withdraw and lose contact with these social relationships.

Electronic forms of gambling which link players to screens and machines in a seemingly "isolating" fashion also occurs in social contexts. Fisher (1993a; 1993b), Griffiths (1989; 1990) and Fisher and Griffiths (1995), in their studies of slot machine gambling and arcade video game playing, show how the rewards of social interaction in gambling environments develop over time and supercede the sensory stimulation of participation which provided the original attraction. Their ethnographic research reveals that there is a complicated social world structured around these forms of gambling. The "arcade kings", for example, form a coherent self supporting social network who play video machines to maximize winnings. They demonstrate "good gamesmanship", play the technical game well, share knowledge and acquired skills with each other, apprentice recruits, divide winnings and losses, and manage their money and emotions well. The primary orientation of video arcade and slot play results in a positive gain in character and authority for this type of player. The "machine beaters", on the other hand, are also skilled players who "know the reels" but their abiding concern is interaction with the machine and a display of technical superiority over it for as long as their money lasts. Beating the machine is an asocial motive and these players resent the presence of other players. They are unable to rationalize their play and invariably chase their losses in an attempt to dominate the machine. For them, poor emotion management and poor money management leads to problem gaming and an obsession with beating the machine as opposed to playing the game (Fisher, 1993a; 1993b).

The literature on community impacts, however, tends to emphasize the local community, more than the social group or the self defined social network. Community impact studies more often try to calculate the benefits of direct and indirect job creation (i.e., the net of any job losses from substitution) and then calculate the value of revenues



flowing back into the provision of community services (Anders, 1977). Some community impact studies tend to focus on particular gaming activities, while other studies, conducted at the provincial or state level, tend to emphasize the impacts of multiple gambling activities. In terms of community impacts, bingo and charity casinos are often seen as the most benign forms of gambling since they are popular and contribute directly to charitable and volunteer organizations (Nova Scotia Gaming Control Commission, 1996; Alcohol and Gaming Authority, 1997). In British Columbia in 1993-94, for example, eight casino management companies employed over 1,000 persons directly and 3,000 indirectly and raised over \$40 million for non-profit groups (Campbell, 1997a:155).

Casinos have also been the focus of community impact studies where they have been introduced, although the emphasis tends to be on economic rather than social impacts. In some communities, casinos have been "cash cows" allowing for economic rejuvenation and diversification and contributing positively to community development. In other jurisdictions casinos have not been quick fixes. There has been considerable attrition in the recent riverboat casino industry in Iowa, and Deadwood's casino industry in North Dakota has been contracting because of competition from recently authorized gaming venues. These developments have had negative community impacts: the cannibalization of local industries and the flight of local capital to other communities (Goodman, 1995:15-36; Hendriksson, 1996:16-128; Black, 1996:49-61; Smith and Hinch, 1996:37-45; Seelig and Seelig, 1998:91-106). Lotteries, because they are administered by provincial or state governments, have not been researched at the community level (other than by revenue studies). A study in California, however, did look at community impacts and concluded that lotteries drained funds from rural regions (Goldman, 1997). Video lottery terminals, for their part, have aroused public anxiety, but not much research. This form of gaming is thought to have few redeeming social features, few positive impacts on communities, and to contribute disproportionately to problem gambling.

Much of the research on community impacts focuses on single issues such as crime, traffic congestion, tourism, etc. This literature has limited applicability for the Nova Scotia experience as much of it focuses on destination gambling sites rather than convenience gambling venues.

Crime is a case in point. Early research studied resort destination sites such as Atlantic City and concluded that crime in the community increased after the introduction of casino complexes (Sternlieb and Hughes, 1983). Later research in other jurisdictions in Canada and the United States also found increases in violent crimes associated with casino development (Hakim and Buck, 1989; Giacomassi and Stitt, 1993; Windsor Ontario Police Department, 1995; Thompson, Gazel and Rickman, 1996). While these studies suggest that casinos were linked to crime in the community, they failed to take into account the tourist factor. Chang's (1996:172) recent study of Atlantic City, for example, discovered that visitor adjusted violent crime rates were actually lower in this community than in other tourist destinations such as Atlanta and Orlando where casinos were notably absent. The failure to take into account personal and structural changes in given jurisdictions (i.e., tourist visits, greater numbers of 'at risk' properties such as hotel rooms, new opportunities for crime, the nature of law enforcement, etc...) suggests that the relationship between crime patterns in the communities and the introduction of casinos is complex and non-linear. In some cases casinos seem to contribute to crime, in other instances there is either no relationship or crime actually declines in the community (Wisconsin Policy Research Report, 1996:2; Stokowski, 1996).

The literature on crime and other types of gambling, however, is sparse. Lotteries and bingo, for example, are rarely implicated in criminal activity perhaps because these forms of gambling are considered socially legitimate and state authorized, or because they seem to have little impact in transforming the everyday patterns of life in a community (i.e., capital inflows, infrastructure change, population increases, new criminal opportunities, etc...). Of course, this does not mean that these gaming activities have been without criminal controversy. Charity gambling, including bingo and charity casinos, have encountered serious problems with theft, fraud, accounting irregularities and political corruption which have negatively impacted on communities (Eadington, 1996:256-57; Campbell, 1992:237-238, 242-245). The proliferation of electronic gambling in the form of video lottery terminal games and its relationship to crime has not received much research attention either. Nevertheless, research on prevalence rates suggests that this form of gambling is on the increase and is contributing to the problem gambler population. This latter group has been found to have higher than average rates of white collar

crime (i.e., forgery, embezzlement and fraud) and to be victimizing employers rather than community members (Lesieur, 1992; Meyers and Fabian, 1993). Thus the growth of a convenience gambling environment suggests that local communities may have to confront increased crime in the form of insurance fraud, theft, robbery and increased social costs in the form of extra police, legal services, counseling, and custodial care services.

Political economy and cultural studies research directs attention to the relationship between gambling activity and wider shifts in cultural and structural values. Thus, factors such as increased alienation, the absence of meaningful work opportunities or changing patterns of social interaction may expand the demand for gambling products and services and, in turn, may impact back on the community, reinforcing anomie, job loss and deteriorating social relations. Gambling may disrupt the traditional social fabric of a community (Stokowski, 1996). It is, of course, difficult to quantify these impacts, or assign cause and effect relationships. However, these cultural and political economic forces form an important part of the understanding of community impacts. They need to be included in any account of the social effects of gambling.

The literature on gambling also acknowledges that there are distributional issues related to community impacts. Two are of particular importance. First, some groups within a community may benefit more than others from the social opportunities afforded by gambling, while simultaneously within that same community, other groups or indeed entire neighborhoods, may face negative social effects such as declining property values, or traffic congestion. Second, in a convenience gambling marketplace, there is mounting evidence that, for some games, a small proportion of players are generating a large proportion of gambling profits and government revenues. These same participants are also generating a large proportion of the social costs associated with gambling, while their activities, ironically, are contributing to benefits that are more broadly distributed within the community (i.e., community and sports centers, fire halls and equipment, educational resources, etc...)[Nova Scotia Department of Health, 1998].

### **5) Governance Impacts**

The social impacts of gambling on governance typically includes the revenue and job related benefits as measured in economic cost/benefit studies. Revenues to governments are presumed to be spent for the public good, and revenues to operators are assumed to create employment. Indeed, approximately one-fifth of video lottery terminal operating revenues in Nova Scotia go to charitable organizations such as legions and sports clubs, and most revenues from bingo go to provide social benefits for communities and community groups (Nova Scotia Gaming Control Commission, 1996-97). While gambling revenues may be taken as a measure of benefit to governments, the question is: are they the most effective way of generating social benefits for communities? How does gaming as a source of raising revenue compare with alternative methods? Some research studies, for example, show that the same amount of government revenue generated by gambling could be acquired by increasing taxes moderately and this would have a less regressive tax effect on the poor as well as fewer negative side effects (Cyrenne, 1995; Kaplan, 1984). Other research raises questions about the ways in which governments manage gambling based revenues. Their findings suggest that governments should target worthy community projects for support and increase their commitment to socially beneficial services (Smith, 1987; 1990).

The social costs associated with the impact of gaming on governance include: reductions in charity donations because of money being spent on gambling and a decline of the better base of charity gambling, displacements of gaming revenues from socially sensitive forms of gambling to commercialized enterprises, and increased government expenditures associated with regulating and treating gamblers in trouble [i.e., law enforcement costs, social services costs, child welfare costs, health costs, and incarceration costs] (Cyrenne, 1995).

### **IV TOWARDS A MODEL OF CONVENIENCE GAMBLING AND ITS SOCIAL IMPACTS**

We have argued that the general characteristics of a convenience model of gambling are different from those of a destination model. One of the major distinctions is that the convenience model is premised on the development of a local market for gaming. The strength of the convenience

model is in its application to particular forms of gaming that occur within Nova Scotia. Indeed, our fundamental premise is that each form of gaming differs in its convenience characteristics and, therefore, in the expected pattern and trajectory of social impacts. Earlier we described how each type of gaming activity differs in terms of its market structure, regulations and characteristics of play. These features, in turn, are expected to give rise to different social impacts. In addition, profiles of gamblers vary with the types of gambling, and must be taken into account in an examination of social impacts. Finally, given the diverse impacts of gambling, a meaningful way of approaching the effects of gaming is to construct a typology centered around the player involving family, education, workplace, community and governance impacts.

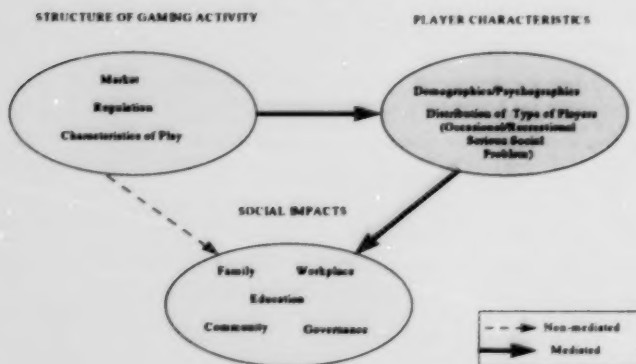
#### **a) A Model of Social Impacts of Convenience Gambling**

We now propose a formal model that links together the types of gaming activities, the types of players and the types of social impacts within a convenience context. The full model can be summarized as follows. Each type of game has particular market characteristics, regulatory frameworks and characteristics of play. These dimensions, in turn, contribute to particular player characteristics, and generate expectations regarding the distribution of occasional/recreational, serious social, and problem gamblers. The resulting player characteristics, for their part, carry implications for the types, distributions, and intensities of potential social impacts. However, some social impacts are directly shaped by the convenience characteristics of the type of game notwithstanding the type of player. The model is depicted in Figure 1(p. 92) and discussed below.

To start, market structure includes geographical dispersion, competitiveness/ concentration, and private/public ownership. Regulation includes restrictions on accessibility (i.e., licensing, registration, places and hours of operation, etc...), agreements regarding revenue sharing and distribution, procedures for ensuring the integrity of the games, and policies for detecting and treating problem gamblers (limits on wager size, health warnings, help-lines and counseling services). The characteristics of play include skill, diversity, speed and continuity of the games, social interaction, concentration and competition, size of wagers and payouts, and risk and predictability of wins and losses.

In our model, the features of each type of game (market structure, regulation and characteristics of play) shape player characteristics including demographic and psychographic profiles. Players are not only attracted to different games, they have differential access and diverse degrees of commitment to their play. As the parameters of the type of game change (either intentionally or unintentionally), so the clientele changes. Marketing strategies, regulatory modifications and game designs are manipulated to develop new player populations. In turn, we expect this to lead to differences in the distribution of occasional/recreational, serious social and problem gamblers by type of game.

FIGURE 1 A CONVENIENCE MODEL OF GAMING



In our model, the player characteristics associated with the structure of gaming activity then influence the expected social impacts across the dimensions of family, workplace, education, community and governance. At a simplistic level, games such as bingo and horse racing which attract retirees or older players and which are played intermittently, may have less negative impacts on community and workplace than do games played at a continuous speed. Similarly, games that are structured to allow opportunities for socialization and stress reduction may provide positive benefits for families, communities and work. Contrarily, the features of

other games which may be isolating in their effects, may offer the least opportunity for recreational playing and the greatest potential for serious social players to become problem gamblers, with the resulting social costs for families, workplaces, communities and government. It is commonly observed, for example, that video lottery terminals offer the greatest potential for serious social players to become problem gamblers which, in turn, may negatively impact on their lives.

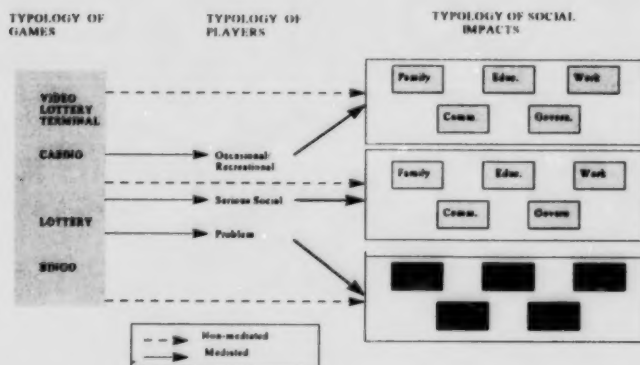
There are also *direct* links from the type of game to the social impacts. Community and governance impacts, in particular, are shaped by the structure of the market and the system of regulations which affect the size, distribution and management of revenues, the extent of economic spin-offs and the political ramifications of promoting convenience gambling. For example, the monopoly partnership arrangement surrounding casino gaming in the province has resulted in contractual and regulatory amendments whereby the government has relaxed controls over the hours of operation, perquisites for regular players, corporate advertising and deadlines for the construction of a new purpose-built casino structure in Halifax. This has led to the loss of promised government revenues, delays in the development of a consumer friendly gambling environment and the proliferation of politicized resistance groups to casino gambling.

In our model, social impacts are disaggregated and the causal connections generating positive and negative social impacts can be made visible. Consequently, social impacts can be analyzed comparatively across gaming activities and types of player. In some instances, our model has sufficient and detailed information. In other cases, there are gaps in our knowledge. For example, we know a lot more overall about community impacts than we do about education or workplace impacts.

In what follows, we apply our model to each of the four major types of gambling activities and derive the key implications of the model for understanding social impacts. We emphasize the critical relationships between typologies of games, players and social impacts. These relationships are depicted in Figure 2 below.



FIGURE 2 RELATIONSHIP BETWEEN TYPOLOGIES OF GAMES, PLAYERS AND SOCIAL IMPACTS



## 1) Bingo

### Structural Characteristics of Game

The market structure and regulatory regime surrounding bingo make it widely available in almost every community. There is disperse control of the market and many venues for bingo play exist. Regulations have increasingly restricted bingo operations to charity organizations and volunteer groups, in effect, limiting private operators in the marketplace. The venues, therefore, tend to be church halls and community centres - comfortable local settings for diverse populations of players. Unlike other forms of gaming, most revenues from bingo stay in the community and are utilized by local groups. While the market structure ensures frequent and regular accessibility in all communities, the hours of play are, nevertheless, limited, scheduled and predictable.

In terms of the characteristics of play, bingo involves small amounts of money wagered and limited wins or losses. The game involves very little skill or pre-knowledge. It requires concentration, but allows time for socializing. There is limited visual or audio stimulation and the entertainment value is much like a night at the pub with friends. Players have a realistic sense of odds and results and play is integrated into



everyday life. The structure of play does not facilitate the pursuit of the "big dream".

### Expected Player Characteristics

The association of bingo with community volunteer groups, its local venues and the social nature of the game attract women more than men. It is a socially acceptable "night out" for many women in small communities which have limited entertainment options. For similar reasons it is also attractive to seniors. The regular, familiar venues and the social nature of the event, therefore, lead one to expect a particular distributional pattern of players: more numerous serious social players and smaller numbers of occasional/recreational ones. This pattern may account for the fact that, on average, bingo players bet more when they play than do other types of gamers. The characteristics of small wagers, small winnings, and restricted times and length of play lead us to conclude that problem gamblers will be less prevalent. Indeed because wagers can be budgeted and success can be seen and predicted, the process of becoming a problem player is expected to be more protracted and controllable.

### Implications for Social Impacts

These structural game and player characteristics, according to our model, have important implications for expected social impacts.

**Family:** Bingo, it seems, provides a break from family responsibilities, especially for women and acts as a stress reducer. It also enables socialization and social interaction to occur among friends, family and extended kinship who not only play together but develop community solidarity and social identity through the game. Positive family benefits, then, are expected to occur for most occasional/recreational and serious social players. However, because the serious player is likely to be married and a woman, there may be negative impacts arising from her attraction and commitment to bingo play. Excessive amounts of money can be lost by serious social players, and time away from family relations and activities can be detrimental to spouses and children. While our model predicts relatively few problem bingo players, the social costs associated with their play may be high. Problem bingo gamblers may take a great toll on families and communities because their gambling problems are thought of as "normalized behavior" and because these behaviors may be

contained or hidden within the family. They may be less likely to be classified and treated as addictive or pathological by formal sources, and more likely to be managed by informal authorities such as spouses/partners, other family members, co-workers, friends or other players.

**Workplace:** The appeal of bingo to seniors and women with young families means that a significant proportion of players probably do not have workplace attachments and subsequently do not experience positive or negative social impacts at work. Furthermore, for those that have work attachments the structural characteristics of the game do not compete with the normal working day. Bingo tends to be structured around leisure hours in the evenings and on weekends. Thus, workplace impacts for occasional/recreational bingo players are expected to be nil. Employed serious social players may find their work performance declining, especially if they are tired, or anxious about financial matters relating to their gambling behavior. However, the ready availability of bingo combined with the demographic profile of most players, suggests that workplace costs and benefits are likely to be minor. Problem bingo players, many of whom share similar demographics with serious social players, are also expected to have low employment rates and low workplace impacts when compared to other forms of gaming.

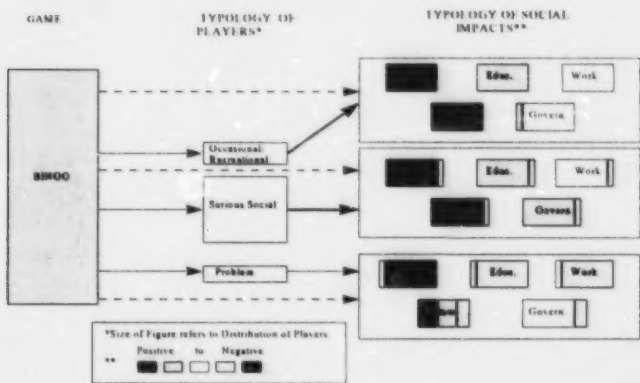
**Education:** Bingo may have direct positive benefits for education because of the way that the market is regulated. Funds raised from bingo by local groups often directly contribute to education. Profits from gambling may go directly into school programs, infrastructure and projects. The local nature of the market also has the potential for creating part-time jobs for young people. The educational impacts of much occasional/recreational play are expected to be positive. For serious social and problem gamblers, on the other hand, there may be some negative effects that partially offset the positive benefits. The education of children may be negatively affected if parents neglect them by spending inordinate amounts of time at bingo. Furthermore, financial losses brought about by excessive bingo play, can lead to family tensions, which, in turn, may be detrimental to the education of children.

**Community:** The benefits of bingo to the community are direct and visible, given the structure of the market and regulation of the game. Revenues flow to community groups who, in turn, provide important services to the community. Because the locations of play are, for the most part, in community centers and institutions, and because the hours are restricted and the winnings are relatively small, one expects few crime-related impacts. The player characteristics surrounding bingo also suggest that bingo will have a positive impact, building and reinforcing social networks for individuals and enhancing local social identity. For the occasional/recreational player the social impacts are expected to be almost entirely positive. For the serious social player the benefits to the community may outweigh any social costs, although it should be noted that serious social players are dedicated to the action, and time and monies spent on bingo may detract somewhat from participation in other community activities. Indeed community costs associated with problem gambling are also predicted to be minimal, given the expected low distribution of problem gamblers among bingo players. As noted above, problem bingo players are likely to be identified, monitored and managed by families and kinship. They are less likely than other types of problem gamblers to become clients of community service groups and agencies. The social costs to the community, then, are predicted to be less tangible and difficult to measure.

**Governance:** Bingo is expected to have few positive impacts on government revenues, since most of the gambling dollars flow directly to local organizations such as community fire halls and recreational facilities. For the occasional/recreational player, the impacts on governance are expected to be nil. For the serious social player, the impacts on governance are predicted to be mostly positive with few negative social ramifications expected. Because bingo is valorized and normalized, it is not usually identified with problem players. It does not evoke public criticisms or provoke backlashes against government policies as do other types of gambling. For problem gamblers, then, there are not likely to be many negative social impacts such as care and counselling costs, criminal justice costs, health costs, and so on. Consequently, even for problem gamblers the social impacts are likely to be negligible.

In summary, the convenience model predicts that bingo play will have positive impacts on families, although there will be negative impacts for serious social gamblers and the relatively small group of problem gamblers whose expenditures of money and time may cause financial distress and interpersonal conflict. The workplace impacts are also expected to be negligible. Positive education impacts derive primarily from the fund-raising potential of bingo, while negative education impacts coalesce around the effects of inappropriate parental gambling habits. Community impacts are likely to be mostly positive and visible except in the case of problem gamblers where the negative impacts are intangible. The impact of bingo on governance is minimal to slightly positive for serious social players (see Figure 3).

FIGURE 3 RELATIONSHIP BETWEEN TYPOLOGIES OF PLAYERS AND SOCIAL IMPACTS IN BINGO



Our model also helps identify trends and issues. For example, because bingo is less "convenient" than newer forms of gambling, one might expect its customer base to decline. Indeed, there is evidence that this is happening in other jurisdictions, however, in Nova Scotia bingo continues to be a game with loyal supporters. This reflects its traditional social base in many small rural communities as well as its regulatory structure which involves local organizations and provides both entertainment value and revenues for communities. This "community-

based regulatory model" may have value for the regulation and structuring of other more recent types of gaming activity.

Another issue that the model highlights is the relationship between the structure of bingo gaming activity and the problem gambler. On the one hand, little is known about problem bingo players. It may be that they escape identification because their activities are normalized and their social costs are thus less visible. On the other hand, the structural characteristics of bingo as a game implies that there is a large population of serious social gamblers who, nevertheless, do not become problem gamblers. Research on serious social bingo players would help clarify the circumstances which promote intense, but controlled gaming and certainly would help us understand the process underlying addiction.

## **2) Lotteries**

### **Structural Characteristics of the Game**

Like bingo, lotteries are "normalized" gaming activities. Since the early 1970s, governments have been involved in lotteries and their participation has legitimized gambling in general. In terms of market structure and regulation, governments have established jurisdictional monopolies on the provision of lottery products. In Atlantic Canada, this monopoly has been exercised through the Atlantic Lottery Corporation (ALC), whose shareholders are the four provincial governments. While the Atlantic Lottery Corporation is owned by governments, it nevertheless has relative independence and exercises initiatives in the design and marketing of products. Each province also implements its own regulations regarding the delivery of products in its own jurisdiction. Thus governments regulate their own monopoly corporations. While the Atlantic Lottery Corporation has a monopoly in the provision of lottery products, their distribution is widely dispersed to over 1,000 outlets, many of which are retailers of other consumer products (i.e., grocery stores, service stations, pharmacies, etc.). Hence, lottery products are widely available in every community through this market structure. The proceeds from lottery gaming accrue to governments as revenues (according to a distribution formula), to operators in the form of profits, and to the Atlantic Lottery Corporation. In this initial round of spending, all of the gambling revenue remains in the region.

In terms of the characteristics of play, the amounts wagered on lotteries are typically small and risks of losses are low. Play is effortless and fits into everyday routines. In this sense, lotteries are the epitome of convenience gambling. However, they lack the social interaction and instant gratification associated with other games. While there are many types of lottery products, some of the prizes can be substantial and lottery draws, in particular, promote the dream of the "big win". If you don't play, you can't win, or share in the dream of winning! Over the past twenty years, lottery sales have grown by attracting new customers through advertising and innovations in the types of games played. There is pressure, then, to continually develop new games in order to avoid market saturation. Most games are typically simple and unskilled, although some products, such as sports pro-line, have been designed to include skill and knowledge. In addition to large draws, new lottery products have also been designed and marketed to mirror other kinds of games like "bingo" and "crossword." These games offer instant gratification, low risk, and small prizes. Thus the lottery is a monopoly but it competes with other types of highly attractive and glitzy gaming, and so is under constant pressure to introduce new games to maintain and expand its player base.

#### Expected Player Characteristics

The structure of the market ensures that lottery products are readily available to a wide cross section of the population. Unlike the restricted venue of a tavern, a legion or a church hall, lottery sites are public spaces frequented by virtually everyone. There is little stigma attached to lottery play. Little skill is required and the games typically involve limited investments of time and money. Thus one would expect a wide distribution of women and men players of all ages. In terms of socio-economic status, one would expect the dream of the "big win" to appeal to those less likely to succeed financially through their own work efforts. Thus we predict that lottery players will be disproportionately drawn from lower income, lower educational groups, and disadvantaged communities or regions.

In terms of our typology, one would expect the distribution to favor occasional/regular players followed by serious social players and finally problem gamblers. This pattern may be explained, in part, by the

fact that lottery play lacks the inherent social atmosphere and interaction of other games and the stimulative effects of instant wins and electronic images. While many lotteries promote the dream of the "big win", most players have a realistic sense of the odds and do not fall prey to uncontrollable, addictive behavior. However, the recent proliferation of instant-win tickets and new gaming products promotes more intensive play and is designed to attract new players who might otherwise identify with other games. Thus, the bingo player is attracted to scratch bingo and the video lottery terminal player to instant pull tab games. This may increase the potential for serious social and problem players to become more committed to lottery play.

### Implications for Social Impacts

What do the structure of gaming activity and player characteristics imply for the social impacts of lotteries?

**Family:** The low investment of time and money on play suggests that the negative impacts on families will be minimal for occasional/recreational gamblers, although lotteries likely impact regressively as a tax on lower income families when compared to other forms of taxation. On the positive side, lotteries provide some family entertainment in devising and selecting numbers, and sharing dreams of success. Lotteries are likely to be a minor part of family entertainment spending and provide little sustained diversion. When compared to games such as bingo or casinos, they are unlikely to provide many positive "stress reduction" benefits for families. Winning big in the lottery, however, will have a significant impact on families. The normal expectation is that the impacts will be positive, but there is the potential for negative effects. For serious social or problem players, one would expect that negative impacts on family finances and relationships would be incremental and minimal.

**Workplace:** Lotteries require little time commitment to play. They are unlikely to disrupt work routines. However, lottery play can be highly social when draws are played collectively. The workplace provides a natural setting for group gaming and this, in turn, serves to build camaraderie among co-workers and contributes to work morale. Given the widespread appeal of lotteries, it is expected that many occasional/recreational players will be employed and will experience some positive workplace benefits. Serious social lottery players are likely to



experience a mix of positive, negative or no impacts in the workplace. Negative workplace impacts such as productivity disruption may occur. We would expect these negative impacts to be negligible, however, since lottery play involves low investments of time and minimum wagering over extended periods, even by most serious social gamblers. Problem gamblers, though small in number, may experience some positive consequences from their gambling in that it enhances their egos and may provide a measure of social integration among fellow employees which may be beneficial to the workplace. However, they are more likely to experience and contribute to a range of negative social effects, from tardiness to dismissal.

**Education:** Because lottery play is normalized and popular, it tends to be widely distributed across diverse populations, and those who play wager small amounts of money. Thus few negative or positive impacts on education are expected, either for players or their families. Educational impacts of occasional/recreational play are expected to be nil. Even serious social play is expected to have few, if any, impacts on education. One potential negative effect of lottery play is ideological. It may inculcate the view among young people that it is easy to get "something for nothing." Furthermore, the pressures to expand and innovate the lottery market and attract new consumers may create a whole new category of younger players, many of whom are captured by these products before they leave high school. For problem players as well, there are likely to be few negative educational impacts, however, where play is especially intense, educational processes can be disrupted and children taught the techniques, motives and rationales of gambling which, in turn, may predispose younger people to gamble.

**Community:** Communities benefit from lotteries because revenues go directly to small local businesses. However, lotteries provide few opportunities to socialize on an on-going basis so community cohesion is not likely to be enhanced by this form of play. The community benefits of government revenues from lotteries are also not obvious or visible at the local level. Indeed, while the revenues from lotteries accrue from a dispersed geographical base but, the distribution of these benefits may not return equally to all communities. Given the preponderance of occasional/recreational players and the characteristics of the lottery games, the main community costs and benefits will coalesce around the

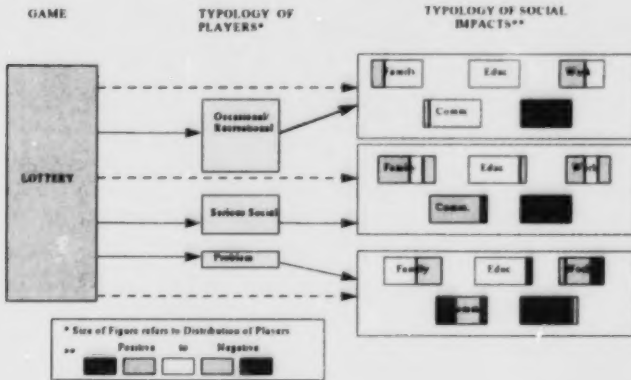


distribution of revenues, both real and perceived. For occasional/recreational players the community impacts are negligible although there may be some positive spin-offs for local community enterprises. Serious social players are likely to evoke positive economic impacts on communities while problem players are predicted to drain community services and resources.

**Governance:** The overwhelming positive impact of lottery play is the substantial revenues which it provides to governments. These profits are drawn from a large player base thus minimizing the political controversies associated with this source of government revenue. For occasional/recreational players and social serious players the impacts on governance are overwhelmingly positive. For problem players, negative impacts are expected to be minimal given the weak association between lottery games, problem gambling and major social costs.

In summary, the convenience model predicts minor positive impacts from lotteries on families and workplaces. Few benefits or costs to education or communities are expected. Governance impacts, on the other hand, are predicted to be mostly positive, due to the large revenues generated and the small social costs created (see Figure 4). Nevertheless, a key issue is distributional. Are the positive benefits accruing to governments being returned to the communities that generated the gambling profits? Are these benefits being shared by those socio-economic groups who initially invested the gambling dollars?

FIGURE 4 RELATIONSHIP BETWEEN TYPOLOGIES OF PLAYERS AND SOCIAL IMPACTS IN LOTTERIES



### 3. Video Lottery Terminals

#### Structural Characteristics of Game

As with lotteries, the government's monopoly in the video lottery market is implemented through the Atlantic Lottery Corporation. Each province sets regulations which structure the Atlantic Lottery Corporation's mandate in that province. In Nova Scotia, the Atlantic Lottery Corporation owns but does not operate the terminals, while in Prince Edward Island and New Brunswick, the Atlantic Lottery Corporation has created "partnerships" with private "coin operators." Government control is thus more encompassing in Nova Scotia. While video lottery terminals are licensed to geographically dispersed private operator, the types of venues for video lottery play are restricted (since 1993) to licensed liquor establishments who apply for the machines. Consequently, the market for video lottery play is mostly limited to those who feel comfortable in licensed bars, taverns, lounges and service clubs. The video lottery market has been growing dramatically since 1993 and eligible businesses have been eager to obtain terminals.

The structure of the video lottery terminal market, however, is changing again as a result of a recent moratorium on the number of machines. With high demand, a new system for allocating and replacing existing machines and operators will have to be designed. The political and revenue interests of the government and the business interests of operators may conflict. For example, governments may wish to maximize profits by relocating machines to high volume venues of play, while simultaneously displacing terminals from low volume businesses and areas. The reallocation of video lottery terminal machines will have important implications for the distribution of types of players and ensuing social impacts, especially since this market is already dependent upon a narrow player base (Nova Scotia Department of Health, 1998).

In terms of the characteristics of play, video lottery terminals are fast-paced and stimulating. They require little skill or knowledge to play and the game options are rather limited. Video lottery play involves a measure of concentration, and the sites are conducive to both socialization and withdrawal to a private world. While individual wagers are low, the opportunity exists for continuous play over long hours, with high risks and expenditures. The atmosphere of play is informal and casual, and opportunities to gamble are available in almost every community. For those who are comfortable in licensed venues, video lottery terminal play represents the height of "convenience".

#### Expected Player Characteristics

The limited game options and the restricted gaming locations attract a particular clientele. This is borne out by the data on video lottery players which indicates that the typical player is male, young, single, and from a lower socio-economic group. The stimulation of the game and the opportunities for continuous play are also linked to the potential for addiction. The structure of the gaming activity facilitates frequency of play, excessive spending and chasing of losses. Given these characteristics of the game, we expect that video lottery gaming will be supported by players who play repetitively and form a small, but intense, segment of the gambling population. Atlantic Lottery Corporation data and the 1997-98 Nova Scotia Department of Health VL Players' Survey show that the number of video lottery terminal players is declining, but the revenues generated from this form of play are steadily increasing. Approximately fifty percent of net revenues from video lottery gambling in Nova Scotia

are generated by four percent of those who play the machines (Nova Scotia Department of Health, 1998:13). We anticipate that the distribution between occasional/recreational, serious social, and problem gamblers will be mixed but that problem video lottery gamblers will have severe, multiple negative social impacts.

### Implications for Social Impacts

What do the structure of gaming activity and player characteristics imply for the social impacts of video lottery terminals?

**Family:** The serious financial and emotional troubles resulting from video lottery play are expected to result in major negative impacts on the family, especially for problem players. More positively, video lottery terminal play provides relief from stress, and the pace and concentration of play can temporarily help players forget tedious or worrisome problems. For occasional video lottery terminal players, then, the net impact on families is expected to be positive. At the other end of the player distribution there will be almost entirely negative family impacts for problem gamblers. These impacts, both emotional and material, will be sharply marked by the demographic profile of the problem gambler, who to date is disproportionately young, lower class, and male. The balance of positive and negative impacts for serious social players is less well understood. To what extent can people gamble at electronic games without experiencing serious financial and emotional problems in their family life? The characteristics of video lottery play predispose players to lose control over their gambling, however, there is still expected to be a population of serious social players who manage well and experience positive family impacts. A recent survey of video lottery players indicates that seventy-five percent of regular gamblers "appear to derive entertainment benefit from VLT play and do not report or manifest any long term ill effects from VL gambling" (Nova Scotia Department of Health, 1998:2).

**Workplace:** Because video lottery terminal venues are widely dispersed and have long hours of operation, play may disrupt the workplace, creating problems of tardiness, absenteeism and productivity. Financial losses from gambling can quickly escalate, leading to abuse of company credit cards, employee theft, check forgery and fraud against employers as evinced by cases of problem gamblers. Occasional/recreational video lottery terminal play, on the other hand, may provide minor opportunities

for socializing with workmates or making new business contacts. For this type of player, the net effect of their play on the workplace are expected to be either neutral or somewhat positive. For serious social players, the social effects would probably be blended: some would have no impacts, others would impact beneficially, while, still others would impact so negatively that the problems of lost productivity, for example, would outweigh any minor social benefits.

**Education:** Intensive video lottery play among young adults can disrupt education in the same way that it disrupts work. The convenience of the sites and the appeal of the game to young, single males makes this population a matter of particular concern, where educational impacts are involved. We anticipate that problem gamblers will have the most serious negative impacts on educational processes and institutions. In addition, there are negative educational impacts predicted for the children of problem gamblers because family relationships and finances will suffer. Serious social players, while they risk developing some gambling problems, may actually have few positive or negative effects on education. For occasional/recreational players there are expected to be no educational impacts arising from their play.

**Community:** The structure and nature of video lottery terminal play affords intensive levels of play and, subsequently, generates substantial revenues which can benefit the business community. Additionally, the demographic characteristics of the players also provides for some sense of community among them. It is expected, then, that serious social players will experience video lottery terminal play as an important, positive part of their social world and so the community impacts will be mostly positive. For occasional/recreational players there will be less of a social world around gambling and the positive benefits will be measured in terms of entertainment value and stress reduction. The negative impacts of video lottery terminal play on the community, however, can be especially dramatic for those who play continuously and in an uncontrolled manner. Serious social and problem players can become socially isolated, and problem gamblers are very likely to add substantially to social, legal, and health costs in the community. Divisions within and between communities may also surface around the distribution, management and regulation of terminals where, for example, one sector of the community favors expansion and another sector favors prohibition.

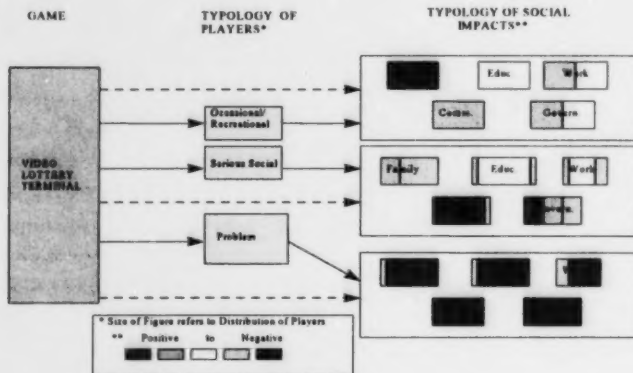
**Governance:** The major positive impact that arises from video lottery terminal play is the increasing revenues which accrue to the government. For the occasional/recreational player their impacts on governance will be mostly neutral or slightly positive. For serious social players their impacts are expected to be positive overall. Positive benefits in the form of greater revenues will derive from the intensity of their play, while at the same time there are expected to be mounting social costs associated with potential gambling problems. For problem gamblers the benefits of high revenues are offset by the high social costs and the associated political controversy. Negative impacts will also arise from the allocation of terminals (i.e., patronage issues, business/government conflicts, political influence peddling, etc.). While the net effect of serious social players on governance is likely to be positive, for problem video lottery players, their impacts will be skewed towards the negative. This trend is likely to continue and deepen because the current characteristics of the game create a drift from serious social status to problem status and, indeed, tend to blur the boundary between the two.

In summary, the convenience model predicts rather strong negative impacts on families, workplaces, communities and education arising from problem video lottery gambling. We expect both revenues and costs to be concentrated around a small group of committed players. Governments are thus challenged to promote and administer the revenue benefits while balancing the social costs and calculating the political backlashes. For occasional/recreational players, and indeed for many social serious players, however, the positive impacts may outweigh the negative ones or there may be no impacts at all (see Figure 5). This is an area of research that requires much more attention.

Our model suggests that changes in social impacts are affected by changes in the market, regulatory structure, or characteristics of play. The recent strategy of the Nova Scotia government has been to restrict the number of video lottery terminals. This policy initiative, however, may have unintended consequences. It may escalate the trend towards more concentrated and harmful play by fewer gamblers. It may create not only allocation problems but it may actually escalate the social costs. The Atlantic Lottery Corporation, on the other hand, is pursuing a policy of expansion: trying to capture new markets by designing new games which attract new players and trying to alter the features of existing games so

that they are more conducive to controlled play. These strategies are expected to have different social impacts.

FIGURE 5 RELATIONSHIP BETWEEN TYPOLOGIES OF PLAYERS AND SOCIAL IMPACTS IN VIDEO LOTTERY TERMINAL



#### 4) Casinos

##### Structural Characteristics of Game

In the case of casinos, the government of Nova Scotia has entered into a partnership with ITT Sheraton and granted it a monopoly, albeit a regulated one. ITT Sheraton negotiates the operating terms with the province, including profit sharing. This arrangement is different from other provinces, where casinos are actually owned and operated by government crown corporations. The casino market in Nova Scotia has a private, multinational corporation as an additional player. While ITT Sheraton brings expertise and capital to the casino gambling business, it has interests which are different from government and it extracts profits out of the region. The corporation has exerted considerable pressure on the government leading to changes in profit sharing, hours of operation and house rules.

The market structure is characterized by limited sites; two casinos geographically restrict accessibility. Thus patrons from outside these areas have to plan their visits in advance. While tourism contributes to the



casino market, advertising and target marketing are much more important strategies to develop in order to attract new patrons from within a small market, after the initial undersupplied demand has been met.

The casino atmosphere is exciting, entertaining and glitzy. It offers a variety of games, differing in skill, knowledge, payouts and stakes. There are more strategic options available to players. A visit to the casino is promoted as "action", rather than "big dreams." It may be part of a night out on the town, complementing other forms of entertainment such as dining out, or competing with others, such as movie going.

### Expected Player Characteristics

The more formal atmosphere of the casino and the high stakes games attract players who are older and have more disposable income than do players who play video lottery games or bingo. We would expect a balance between male and female players. Furthermore, we also expect casinos to be marketed in ways which promote continuous gambling and which target specific market niches such as retirees, seasonal tourists and local high flyers. The variety of casino games is expected to attract a broader range of players when compared to other forms of gambling. Accordingly, one expects casino play to attract a large number of occasional/recreational players, for whom casino gaming is a form of leisure and entertainment. The structure of casino play will also attract groups of serious gamblers who construct a social world around their games. Our model also predicts that there is a potential for problem gambling, especially for those who live in close proximity to casinos. However, we expect that problem gambling may not be as extensive as with video lottery play, since casinos are not as accessible as video lottery sites.

### Implications for Social Impacts

The structural characteristics of casinos and their related expected player characteristics imply the following social impacts.

**Family:** We expect that the entertainment experience of casino play and its appeal to a growing clientele will have positive family impacts. The large numbers of occasional/recreational players are expected to obtain these entertainment/consumption benefits with few offsetting costs. As



with video lottery terminal play, a balance of positive and negative family impacts for serious social players is expected. On balance, it is expected that the proportion of problem gamblers will be smaller when compared to serious social and occasional/recreational casino players. Nevertheless, some serious negative impacts will be experienced by problem gamblers who spend greater amounts of time away from their families and greater amounts of household income on gambling.

**Workplace:** Our model predicts that most negative or positive impacts will likely occur in workplaces adjacent to casino sites. The existence of many occasional/recreational casino gamblers leads us to expect minimal workplace impacts overall. Many daytime casino patrons are expected to be seniors, for whom workplace impacts do not readily apply. Potential positive impacts include building business relations and enhancing workplace morale, while the long hours of casino operation and continuous play, create negative workplace impacts such as absenteeism and tardiness. These negative impacts will be more of a factor for serious social players. However, to the extent that serious players restrict their play to hours after work, these workplace impacts may be minimal or mixed. Problem casino players, however, may jeopardize their jobs and even harm their employers by engaging in illegal activities at the workplace.

**Education:** Educational impacts are expected to be negligible or nil. However, as casinos attract higher income groups, we may discover more and more gambling among university students living in these urban areas. Students' education may be impaired emotionally, financially and organizationally. For the occasional/recreational gambler we expect no impacts; for the serious social gambler, we anticipate few positive or negative impacts; and for the problem gambler we predict negative impacts ranging from missed classes to squandered educational opportunities.

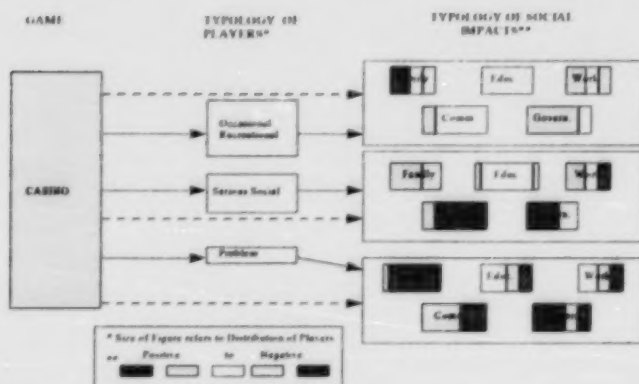
**Community:** Casinos have a strong positive community impact via the direct and spin-off jobs that they create. However, in a convenience model it is difficult to predict whether these are net jobs or a redistribution of jobs. Furthermore, it is expected that community identity and solidarity benefits will be relatively minor, since casinos are located in large, impersonal urban areas. The major negative impact of casinos on local

communities is thought to be crime. However, in a convenience model this may not be so, since casinos represent an added entertainment option in an otherwise busy downtown center. Casinos, we anticipate, are not likely to add to the crime statistics. The community impacts from occasional/recreational and serious social players are expected to be positive, on balance, while problem gamblers will generate net social costs for the community.

**Governance:** Casinos are potentially large sources of revenue for governments; however, the extent to which these are realized depends on how profits are divided between them and the private sector. Conflicts over profit sharing, regulation, advertising and administration generate political controversy and can have negative impacts on governance. Furthermore, pressures on government to make casino gaming ever more accessible may increase the potential for excessive gambling. For problem gamblers, our model predicts a division between positive revenue benefits accruing to governments and major social costs arising from problem play. For serious social gamblers, we anticipate slightly more positive benefits and more benign social costs. For the vast majority of occasional/recreational players we anticipate few negative impacts and on balance we predict mostly positive social effects.

In summary, the convenience model predicts a diverse relationship between types of players and social impacts for casinos. Family impacts are expected to be mostly positive for occasional/recreational and serious social players and highly negative for problem players. Educational impacts are negligible except for problem players where some minor negative impacts are predicted. Workplace impacts are expected to be rather varied for all types of players. Community impacts are predicted to be mostly positive for serious players, negligible for most occasional/recreational players and almost entirely negative for problem gamblers. Governance impacts are predicted to be mostly positive, with serious social and problem players creating some limited negative government costs (see Figure 6), and regulatory conflicts generating potentially negative impacts on governance.

FIGURE 6. RELATIONSHIP BETWEEN TYPOLOGY OF PLAYERS AND SOCIAL IMPACTS IN CASINO



## V APPLYING THE MODEL: PRELIMINARY EVIDENCE

In developing and constructing a convenience model of gaming and its social impacts, we used a variety of exploratory research techniques such as literature reviews, secondary data analysis, expert interviews, focus group data collection, key informant interviews, and life history and ethnographic studies of gamblers and gaming activities. Taken together, then, our research efforts resulted in the formulation of a model that links together the types of gaming activities (bingo, lotteries, casinos, video lottery terminals), the types of players (occasional/recreational, serious social, problem) and the types of social impacts (family, work, education, community, governance) within a convenience context or framework. Our research also provides preliminary evidence for the model's predictions and has implications for future research.

Our focus group research, key informant interviews and detailed accounts of gamblers' lives were particularly helpful in developing our conceptual model and in detailing the social costs and benefits of gaming. As noted earlier, our focus groups were composed of regular players who played either bingo, lotteries, casinos or video lottery terminals. Through

structuring our focus groups in this manner, we were able to obtain a better understanding of the positive and negative impacts of gambling by type of gaming activity. Our life history approach involved carrying out interviews with occasional/recreational, serious social and problem gamblers by type of gambling activity. A life history approach allowed us to explore gaming profiles, early life experiences with gaming, attractions to and involvement with their preferred gambling activities, self management strategies and the positive and negative impacts of gambling on family, work, education, community and governance. This approach helped us sort out those factors which may be predictive of a person's gambling behavior. Our key informant interviews of individuals working in institutions or services affected by gaming also provided us with insights into the social impacts of gambling. The results of our focus group research, ethnographies and key informant interviews were instrumental in teaching us more about gamblers and gambling behavior which was either recreational or enduring but not necessarily problematic. What follows is a summary of the key findings from our focus group studies, life history research and key informant interviews as they relate to some predictions which flow from our conceptual model.

#### **a) Family Impacts**

Our model predicts that bingo play will impact rather positively on families and communities with few tangible negative effects. Positive family benefits are expected to occur for most regular bingo players. Although some problem bingo players are predicted, their social costs are expected to have a significant impact on families and communities. Lotteries are expected to have fewer positive benefits for players' families compared to other gaming activities and even, for serious social and problem players, we anticipate that the negative impacts on family finances and relationships will be limited when compared with other types of gaming. The entertainment experience for a growing number of regular casino players is also expected to have positive family impacts with few offsetting costs. On the other hand, the serious financial and emotional troubles resulting from video lottery play are expected to have significant negative impacts on the family, especially for problem players.

The literature on family impacts tends to focus on problem gamblers and to stress the negative impacts of gambling on family life. Our focus group, key informant and life history findings however, suggest

that the type of gambling activity provides a range of family impacts on gamblers. Among the more positive effects of gaming on the family are the following: diversions from daily/family pressures, additions to family entertainment, enrichment of social interaction and improved family relationships. Negative family impacts include financial problems, interpersonal conflicts, emotional crises and marital breakups.

In our focus group research, we explored the perceived benefits and costs that gambling brought to the family for players who regularly played bingo, lotteries, video lottery terminals and casinos. All gaming activities had potential advantages. For bingo players, the attraction was a "night out," which generally meant a way of relieving stress or managing family responsibilities. According to one bingo player "you think about other things, and if you've had a hard day you look forward to [bingo]." Indeed participants in all types of gambling agreed that it provided pleasant diversion from daily/family pressures. Bingo and lottery terminal play were particularly enduring and engrossing for players because they demanded concentration, while lotteries afforded players only fleeting fantasies and temporary liberation from daily concerns. Bingo and video lottery players indicated that their games allowed them "to get their minds off things", while casino players were less likely make such assertions. Casino patrons were not nearly as immersed in their gaming and many stated that the break from family routines and pressures was far more important for middle aged participants with children than for young people or seniors.

Our life history subjects echoed similar sentiments concerning the benefits of gaming as an "escape" and/or a stress reliever. Many bingo players viewed their play as a positive strategy for managing familial stress, while most video lottery and casino players viewed their gambling as a positive recreational activity. A bingo player put it as follows, "Bingo looked kind of healthy, there were only two hours that I could devote to bingo. I could then go home and go to bed. Emotionally bingo was a means of escape. It was time for me to sit down by myself." For the serious social player, gambling offered more of a social outing and a social world around which personal identity and social integration were forged. According to one female bingo player who attended bingo at least three times a week, "I had a lot more time and not a lot of money, but I have a lot less responsibilities with my money. I started gambling more

regularly in my early fifties, with having more time and less responsibility." Serious social video lottery players also viewed their activity as a healthy "source of relaxation" and a "way to wind down" after a stressful day. One player indicated "If I have a little bit of time to kill, I find it relaxes me more than anything else." Another stated "I've only got a certain amount of bucks in my pocket that I'm willing to put towards entertainment just to pass the time." For serious social players, the casino experience also offered a welcome "time out" and an opportunity to socialize with family or friends. For them, the casino was valued as an inexpensive and alternate form of entertainment. "I can go in and play the afternoon, say for four or five hours of entertainment ..., I figure that's a cheap afternoon's entertainment for all that fun I've got out of it." For draw lottery players there was some entertainment value attached to their gambling, but little obvious family benefits, and only fleeting "escapes" from daily routines. As one serious social lottery player stated "I keep thinking my numbers are going to come up... because it's a dream, that's what it is for me.... If I won it would take all my problems away.... It's a fantasy."

Focus group gamblers also saw gambling as an activity which nourished family relations, insofar as it included spouses or other family members. This was especially so for bingo players. Regular casino patrons regarded also the casino as a "new form" of family entertainment. As one player put it "My wife and I will go down to a [bar] and have a few drinks and some chit chat, and then we will go over to the casino." Lottery participants, on the other hand, felt on-line lottery tickets added only *somewhat* to family entertainment. "One way it [lotteries] might add to family entertainment ... with my family is when you sit down and choose numbers ... if you have 6/49 and you have six family members, you have to pick a number per person." Few video lottery players appeared to gamble with spouses or family members and most were not likely to view this type of gaming as adding to family entertainment. Most focus group participants who gambled responsibly stated that their wagers on gambling came from discretionary income which would otherwise be spent on entertainment or saved. Winnings were thought of as "treats" and players were realistic about how their gains from gambling could be used to supplement their family income.

Our life history findings suggest that all forms of gaming may contribute to building social and family relationships. Bingo players, we found, were introduced to gaming at an early age by family members who often viewed it as a shared and valued activity. It provided an opportunity to socialize with others, further strengthening and extending not only family relationships but friendship networks as well. Bingo playing was a central part of the serious social player's world compared to the occasional/recreational or problem players. As noted by one serious social bingo player:

You go out with your friends and your bingo buddies. You sit in the same seat every night just so everybody knows where everyone will be. The social interaction at the bingo hall is an event in itself, apart from the bingo play. You have a little game of cards while you are waiting for bingo to start.... It passes the time and you catch up on the gossip. Eventually you will get to know everyone that goes ... and talk to everyone all over the bingo hall. You listen to the muttering and grumbling ... Its [bingo] more of a social outing ... It [bingo] is a social form of entertainment. It gets you out of the house, and allows you to have social contact.

In contrast, occasional/recreational and problem bingo players were less dedicated to gaming at local or charity bingo venues, more likely to frequent commercial bingo venues, and less likely to be interested in the social aspects of the game.

Casinos, on the other hand, were characterized as less familiar, formal, party-like environments which provided opportunities for family members and friends to meet and socialize on a less than frequent basis. For the occasional/recreational player, casinos provided a circumscribed opportunity for family outings and interaction. "It became a social thing for the whole family. For fun we would go out to supper and then as a family unit rather than going home, going to a casino seemed like a nice way to end the evening. We'd go to the casino together for an hour or so, watch each other play and we'd laugh and have a good time. Wander off and then come back together." The casino was seen as an additional entertainment venue and had minimal impact on family or extended family relationships. For others, casinos had greater appeal and importance in sustaining family



or spousal relationships. According to one elderly couple who were serious social gamblers, "We belong to the seniors Club 55 and we get a certificate in the mail each month which gives us two free meals. We also receive free parking. The casino gives us a night and day out, time shared together as a couple." Another serious social player remarked "It's [casino] very social because you talk to the people that are there. You see people that you know are regulars."

Lottery and video lottery terminal players, on the other hand, were less likely to view their gaming activities as having an impact on family relationships, the exception being if one was a winner. For most lottery players their play was usually random, related to jackpot size, involved little expenditures and was integrated into daily routines. That said, lottery players did report that lotteries enhanced friendship networks. For serious social lottery players, gaming involved family, friends or fellow employees. According to one lottery player "I go back to this group of gentlemen every morning that sit at Tim Horton's and have their coffee and they'll break open their tickets. Just a social thing. It gets everybody laughing and joking and they're just there for a good time and if they win a few dollars, that's a bonus for them." The serious social video lottery player, similarly, reported that they played in a familiar environment and valued the opportunity to socialize with others while engaged in gambling, although they reported little family impacts. "You're sitting there talking to the individuals on either side of you. If you are doing extremely well, you discuss the play and have some lively conversation."

Findings from the focus groups confirmed that there were negative social impacts on families: financial problems, interpersonal conflicts, emotional stress and marital breakup. Financial distress was emphasized as a negative impact by bingo and video lottery players. This finding is consistent with other research results which found that bingo and video lottery gamblers had the highest average monthly gambling expenditures (Alcohol and Gaming Authority, 1997). Indeed, a financial advisor, reports that gamblers are increasing in his business and they now represent approximately 3 to 5 percent of his overall caseload. Insolvency tends to be related to two types of gaming; bingo and video lottery terminals accounts for sixty-five percent of his gambler-related caseload. Indeed, the majority of gamblers seeking financial help were female, blue collar workers who were over the age of thirty. He indicated:



"I have seen gamblers who have financial debts from \$500 to \$40,000. However, I don't think the key issue is size of the debt, but the situation in which the gambler finds him/herself. There are more gambling products on the market and people get habituated to gambling which increases in the opportunity to get into financial problems. There are so many opportunities today [to gamble] that it [a financial problem] may be a cumulative effect. Video lottery terminals more than anything else may simply be the overriding factor"

(personal interview, 1998).

Interviews with "Help Line" personnel also indicated that financial difficulty was a major social impact leading to food shortages for families, missed mortgage payments and rent evasion. The "Help Line" received in excess of 4,000 calls in the first year and the numbers are growing. The majority of calls came from people between the ages of 25 and 45, who were attracted to video lottery play. Callers were equally male and female, and many were family members, friends or employers who were worried about family conflicts, emotional disorders and marital breakups caused by gambling. According to a Help Line representative "this problem [financial distress] normally comes first and others [problems] follow" (personal interview, 1998).

The findings of our life history studies support the observations of focus group participants and key informant interviewees. Financial distress is the major social impact affecting families, particularly those of disordered or problem players. In the case of a middle aged bingo player her gambling expenditures eventually totaled approximately \$2,000 per month. She had accumulated gambling debts in excess of \$25,000 and managed to hide her gambling losses from family and friends for approximately four years. "Every day was total desperation. Every day, because I knew I had to get the landlord off my back or get the power company or whoever I had to whether it was legal or illegal to get the money which was intended to pay the bills. My mind was so preoccupied with gambling that the bill would never get paid." To support her gambling, she used capital from household funds, family savings, credit cards, banks and other lending institutions, as well as loans from friends

and family members. Finally, she resorted to forging stolen cheques from her husband's employer. Eventually, she was caught and convicted. Following a period of incarceration, she separated from her family and went on family assistance and finally required medical counselling for her gambling problem.

The case history of a problem video lottery terminal player was similar, although the indebtedness was more sudden and dramatic. Within a year of beginning video lottery play, this player was wagering \$100 to \$150 a day. The funds came from household funds, credit card advances and pension payments. This player and his family also experienced significant lifestyle changes as a result of his gambling. Their social activities were markedly restricted as the family faced financial hardships. Casino and lottery players also faced financial trouble. Problem lottery players preferred to play scratch "n" win and pull tab tickets and it was not uncommon for them to spend between \$150 to \$200 a day on this lottery product. One problem lottery player we interviewed spent in excess of \$500 a month and his growing gambling debts led him to expand and diversify his gambling. "I progressed into the video lottery terminals because I couldn't win enough money to look after my losses from the break open tickets. So I had to find some other way, and so I went to the casino because I couldn't get enough money from VLTs to look after my losses."

Our focus group data also confirms that gaming can be a source of family confrontations. Bingo players reported more examples than did other types of players, although all players noted that separation or divorce was relatively rare (i.e., observed only by bingo and VLT players). An unexpected finding was that *not participating* in gambling activities could provoke family quarrels if, for example, a family member forgot to buy lottery tickets for collective wagers. In general, players in our focus groups did not associate many family tensions with gambling. They knew of potential stressors related to gambling but they did not report them as the norm. Emotional problems were also reported as rare family impacts. A consistent finding was that all types of gamblers experienced emotional highs when they were winning and lows when they were losing. These lows were not defined as prolonged depressions. Indeed, the focus group data are consistent with findings from a study by Thorson, Powell and Hilt (1994) which discovered that tests for

depression in a random sample of adults showed no relationship between any gambling behavior and depression.

Among our life history findings, occasional/recreational and serious social players experienced the least family conflicts. This may be because occasional/recreational and serious social players were able to maintain control over their gaming behavior through self management strategies. These strategies involve setting limits on gambling expenditures, restricting access to gambling funds and imposing time frames on gambling activities. By controlling ones' gambling behavior interpersonal relations were normalized and fewer marital and family conflicts were apparent. For problem players, however, financial difficulties, family conflicts, marital breakdowns and emotional distress were apparent. Problem players often resorted to deception, lies and trickery. One problem video lottery player hid his winnings from his wife: "I also became a liar that day because when I went home and told my wife that I played the machines for the first time and won \$80 (he actually won \$180). That allowed me to put \$100 in my pocket so I could play the next day." A bingo player who played excessively recounted "It very nearly destroyed my marriage ... Our financial situation at home was unbelievable and I didn't even fully understand the impact that it had.... I managed to hide my addiction very well and for our fourteen year old daughter it was very, very devastating." On occasion, emotional distress from prolonged and habitual gambling could lead to thoughts of self destruction. One problem gambler who became habituated to video lottery play reported "I decided that there was just no other alternative but to commit suicide. Because then my husband's life was going to be better, my children's life was to be better... So I did attempt suicide."

Negative family impacts seem to be concentrated mostly among problem gamblers, while positive family impacts are more widespread and dispersed. However, these preliminary findings suggest that there are numerous positive benefits associated with gambling for occasional and serious social gamblers as our model predicted. The social world of bingo appears to offer the greatest opportunity for sustaining close family ties as well as for enhancing community resources. Given the characteristics of the game, bingo attracts a regular and particular clientele who finds the environment attractive to building social relationships normally without fear of their gambling behavior becoming disordered. Lottery play, in

particular, affords the fewest benefits for families although it attracts a wider range of gaming participants. As our model predicts, few negative family impacts result from occasional and social serious casino and video lottery play. However, our convenience model also predicts that the structural characteristics of electronic forms of gambling may be instrumental in leading to disordered gambling which, in turn, negatively impacts on the family in a variety of ways.

Future research might profitably study consumer income/expenditure patterns to better understand spending on gambling and its impact on family finances. Given the negative family impacts associated with problem players, the structural characteristics of problem play need to be better understood in different types of games. For example, do the structural characteristics of bingo play attract and commit players such that their serious social gambling does not regularly become problem gambling? Do the structural characteristics of video lottery play encourage serious social players to become problem players?

#### **b) Workplace Impacts**

When turning to workplace impacts, our model suggests that bingo will have little, if any, effects on the players' workplace. Similarly lotteries are not expected to have major workplace impact, the exception being lottery pools where work morale and group solidarity are expected to benefit. Our model also suggests that lottery pools for some serious social players may yield undesirable workplace impacts. For casino and video lottery gaming participants, their gambling may be potentially harmful for the workplace, particularly if they are problem gamblers. In contrast, we can expect that occasional/recreational lottery and video lottery players will either experience some workplace benefits from their gambling or none at all. For serious social players, however, workplace impacts may be mixed depending upon their ability to organize and control their gambling behavior.

Our preliminary research findings indicate that gamblers experience a number of benefits, such as relief from work routines, stress reduction, employer/employee cohesiveness, increased work morale, business contacts, and occasionally the development of cognitive skills that might be transferable to the workplace. The negative effects, on the other hand, include absenteeism, tardiness, lost productivity, declining work

morale, poor employee and employer relationships, theft from employers and job loss. Despite some evidence to the contrary, most gamblers found it difficult to visualize their gaming behavior as having a positive or negative impact on the workplace. To many gamblers, their gaming was viewed as recreational and quite separate from their working environment.

An interview with an Employment Assistant Program (EAP) representative confirmed that gambling is rarely identified as "the problem." Rather it was more likely reported as one subterranean factor in a complex presenting problem. Absenteeism (especially after pay day), tardiness, and abuse of company credit cards were identified as symptoms of gambling-related problems. Gamblers who became problems at work tended to be young, in the low occupational jobs, had a history of other problems such as depression, social phobias and dual addictions and disproportionately played video lottery devices.

Our focus group participants were asked to consider possible work-related benefits of gambling as well as possible negative impacts. Bingo players related that gambling aided memory development and eye-hand coordination skills which were transferable to work. They emphasized that bingo was important in reducing workplace stress and in fostering friendships with work-mates. Video lottery players saw little connection between gambling and the development of work skills, although two players found employment as a result of gambling and two others reported that they regularly played with employees from the same company. Casino gamblers identified the casino as a place to "schmooze" and cultivated business contacts, while lottery players reported that draws, pools and sports betting afforded "minor breaks" from daily work routines.

Our life history findings suggest a slightly different pattern. As expected, bingo players were the least likely to experience any positive effects in the workplace, as most players were women working in the home. Lottery players, on the other hand, did encounter workplace impacts. Unlike bingo which is usually scheduled outside the working day, lotteries can be played on a frequent and continuous basis. A serious social lottery player who played scratch tickets while at work described his gambling as a welcome diversion from the rigors of his job. It

alleviated stress but in some cases it could lead to problems if it became a preoccupation. Another serious social player noted that dreaming and working might not mix. "Why can't I just be ... sitting at my desk scratching tickets? Why is this man [a customer] coming in here buying stuff? Get out. I can remember saying those things [to myself]. Like I would take the phone off the hook because I didn't want someone to call while I was scratching my tickets. I can remember that, so work definitely got in my way." Nevertheless most lottery, casino and video lottery players acknowledged that gambling in the workplace usually played a positive role in developing camaraderie and team spirit among employees and employers. Lottery pools and sports betting provided welcome diversions from boring work routines. According to one player, "I actually set up the 6/49 pool.... In the larger offices [where he worked] there was the hockey pool. We also had a loonie flip where every Friday afternoon at about 4 o'clock about 30 of us would get together and odd man out type of thing, and somebody'd win \$30. The effect on my workplace ... some time it took me to set up ... but it never effected my work. You couldn't afford to let it affect your work. It wasn't set up like that but, in fact, it was a team building thing.... At Christmas we would distribute all the winnings [from pools] and everybody would get \$60 or \$80 and we'd go out and buy a pizza or something for everybody at lunch. It was a building thing within the bank. It got everybody together."

The only participants in our focus groups who reported workplace costs were video lottery terminal players. For them tardiness, and even absenteeism were routinely reported. As one video lottery player put it "I was late coming back from my lunch hour once or twice because I was caught up in the game." Furthermore, three other players who had received employee assistance, including one who had declared bankruptcy, were subsequently dismissed. While such cases were rare, the consensus was that the impact of video lottery terminal gaming was a growing workplace concern. A bingo player's comment was typical. "I think those kinds of [negative] problems would be somebody that was really addicted to it [gambling] and we don't seem to know anybody who is like that. It's just a night out for most of us."

As expected, our life history findings confirm that the negative effects of gambling on the workplace are mostly experienced by problem gamblers. Among the negative impacts were deteriorating relationships



with employers and employees, absenteeism, increased sick time, lost productivity, business theft and job loss. In the case of a problem bingo player, her husband's employer was victimized. She stole approximately \$4,000 from his business, "My husband was working for a small company and he had keys to the office. I went into the office one night, took some cheques and cashed them.... He didn't lose his job because I went and told them myself.... They pressed charges on me which I fully understood." For problem casino players, their play often led them to be late or absent from work, to misuse sick time to gamble and, in one case, to lose their job. "I would take long lunch hours [to gamble]. On Friday's I would be gone at two o'clock in the afternoon and you wouldn't see me. I would tell my employer that I had a doctor's appointment and that would give me an extra hour." Another player hid his gambling from his employer by using his vacation or sick time to gamble. "It [gambling] was planned. I used all my leave. I kept my sick leave because I could use so much of that to gamble. So I would just take a day off and I'd get up and instead of going to work, I'd go to the casino and spend the day there." A third reported that he eventually stole from his employer and was caught and dismissed despite having an excellent work record. He commented, "that's the only job I ever lost. It was very difficult. I'd never been fired, I'd never even gotten a reprimand in any employment that I've had."

Despite Employee Assistance Programs at work, most gamblers indicated that they did not utilize such programs. An occasional casino player who was a teacher remarked, "I think personally if I had a problem with gambling I'd want to go outside the school system. I have this thing about confidentiality." An excessive problem gambler also reiterated "I didn't want to have it too close to work. I didn't want them to know that I was gambling." These findings are consistent with the observations expressed by EAP representatives and Help Line personnel, namely that gambling is more often treated by family and friends than by workmates.

The convenience model suggests that gambling is becoming integrated into everyday life and therefore gambling impacts may increasingly be felt in the workplace. Our preliminary findings suggest that for occasional and serious social players most types of gambling have little impact on the workplace. Lotteries, especially draws and pools, however do have positive and negative impacts on the workplace as do

casino and video lottery play. As expected, problem gambling has more negative workplace impacts in the form of absenteeism, poor productivity and job loss. Our findings indicate that few problem players are willing to take advantage of programs at their work sites designed to help them.

More research is needed to examine how work sites are being impacted by the commercialization of ever increasing gaming products (Lesieur, 1989). Do specific industries, organizations or occupations have higher gambling rates than others? Are these related to job stress, boredom, lack of control, access to funds (company credit cards), opportunities to be out of the office (sales staff), proximity to gambling venues, etc...? What workplace practices are effective in promoting responsible gambling and detecting problem gambling? Also, if gamblers prefer not to seek help at the workplace, more anonymous sources of help need to be made available. While preliminary evidence suggests that gambling is not considered a major problem by employers, this has not been well documented in the academic literature generally or in the local context specifically. Future research should include a workplace study to understand the culture of gambling in the workplace and to determine both positive and negative effects of new and more commercialized forms of gambling.

### **c) Education Impacts**

When focusing on education and gambling our model predicts that bingo will have more positive educational impacts than other types of gambling. Negative impacts of bingo on education arise from possible parental neglect of children and/or approval of gambling habits. Lottery and casino players, on the other hand, will experience few, if any, positive or negative impacts on education. Since video lottery gaming appears to be more attractive to younger players, we can expect more serious and detrimental educational consequences among this population of players and it could include as well casino slot players.

Like the workplace, there appears to be limited research conducted on the educational impacts of gambling. Existing studies focus mostly on the prevalence of adolescent gambling and its impact on students' educational experience. A local gambling Help Line counselor stressed that educational impacts may be hidden. "Research states that it [adolescent gambling] is more of a problem than we are seeing" (personal interview, 1998). Our preliminary research findings suggest that there



may be some minor institutional and personal benefits associated with gaming. In a number of communities gambling revenues have been used to supplement educational needs and school resources while at the same time gambling has been deployed pedagogically to develop overall social skills for students. Learning about gambling may convey important lessons for school aged children about self-control, money management and taking risks responsibly. On the other hand, our findings also indicate that disordered gambling has the potential to inflict educational and emotional harm on children.

In our focus group research, we probed for positive and negative effects of gambling on education. Bingo players, almost to a person, saw their gaming as contributing to educational charities and programs. For them, it played a positive role in raising funds for school activities, supplementing educational resources (i.e., school outings, computers, sports equipment, etc...) and providing part-time employment for students. Gambling, they reported, also taught budgeting skills and financial management, although most focus group participants readily acknowledged that other social games were better suited to communicate these skills. According to one bingo player "Tell them [children] they can only spend so much on their bingo, and that's it. Give them so much a week and say 'OK, if you're going to spend that much on bingo, that's all you're getting.'"

Video lottery players were divided in their opinions of the educational effects of gambling. Several believed it would teach children how to set limits, accept winning and losing, and contribute to greater social skills. According to one player "Well if you go in with \$50 and say 'I'm only going to spend \$20 and you leave after you spend \$20, you're teaching them [children] how to set limits.'" Another reported it helps you "to accept winning and losing, cause I play video games with my brother [and] when I beat him, he gets mad and starts hitting me and stuff like that." A third stressed that it taught the value of a dollar:

My seven year old likes to scratch a ticket once in a while, but when she scratches it she's paying for it out of her money that she earned herself. When she scratches her two dollar ticket or whatever, and her two dollars are gone and her

little four year old sister goes to the store and buys candy and she doesn't get any, she's learning the value of money. Because then she's upset and that's how you teach them, and you tell them, 'see, if you didn't waste it on the ticket, you would have the money. It's a teaching tool to some point.

Other video lottery players, however, emphasized the negative educational impacts. "I find them machines (VLTs) to be very powerful things and their [youngsters] judgment, they'd be taken in. They'd lose their social skills, they probably wouldn't be able to make good judgments any more. I don't think it would be a good teaching tool."

Casino players reported few educational benefits or costs associated with their form of gambling. But all types of players recognized that problem gambling among adults could be transferred directly to their children and have major social costs in the form of educational deprivation and youthful addiction. The educational impacts of gambling were thought to be intertwined with family impacts, and problem adult and adolescent gambling were viewed as linked to each other.

Our life history findings confirm that types of gambling such as school raffles, charity bingo and casinos are perceived as legitimate activities to raise cultural capital to supplement school supplies and equipment and to fund educational trips. This kind of gaming has positive impacts on students' educational development, interactive skills and confidence. According to one serious social bingo player "My sister and I know schools that use it [gambling] as a form of fund raising .... At least the money goes to something constructive to help rather than going to individual people's pockets." A regular casino player similarly remarked that gambling had some qualified benefits. "At least students are learning to add and subtract as a by-product of participating in this kind of gambling activity."

Our life history studies, however, also noted that the spread of problem gambling could have damaging effects on youth. One serious social casino player observed that teachers in his community say gambling among adolescents is on the increase and is becoming a serious problem. A problem bingo player reported that she neglected her family to such a

degree that her children experienced a decline in their school performance. "The impact for my ten year old daughter was that she kind of turned inwards. She started getting in a little bit of trouble at school. Kind of attention seeking at school.... I think it was hardest for her to handle ... eventually she got expelled from school." Indeed, social workers anticipate that child neglect will rise as a result of increased parental gambling. As families of problem gamblers face greater financial hardships children are at greater risk of being victimized or themselves becoming adolescent gamblers (social worker interview, 1998).

As our model predicts, many gamblers reported that funds raised through gambling in local communities contributes to school programming and projects. As expected, occasional and serious social players had a difficult time identifying any positive or negative impacts of gambling on children. For children of problem gamblers, however, because family relationships and finances suffer, negative educational impacts were more likely to be felt. For most gamblers, electronic games were appealing to youngster and as such were expected to play a major role in the spread of adolescent gambling.

Our preliminary findings suggest that the impacts of gaming on education are only starting to be understood. Gaming appears to have the greatest positive impact on supplementing institutional resources rather than in enhancing personal skills or interpersonal relations. Negative impacts on performance and aspirations can result from a student's own gambling or that of their parents. More research is needed to understand how the growth of convenience gambling is affecting young people, especially as gambling becomes more electronic and marketed to younger players. Research is also needed on the allocation of gambling revenues and whether [or not] regulatory changes in gaming can actually have a net benefit for educational institutions. Finally, the role educational institutions can play in teaching responsible gambling behaviour needs more research.

#### **d) Community Impacts**

The impacts of gambling on communities tend to be defined in economic terms, such as the benefits of direct and indirect job creation. New types of gaming, such as casinos and video lottery terminals, result in additional jobs in ancillary services such as transportation and

accommodation. However, these economic benefits are often accompanied by direct and indirect social costs that communities may incur, such as increases in illegal activity and in the number of problem gamblers. Unpaid debts and bankruptcies of gamblers translate into losses for those who are lenders; criminal activities translate into economic losses for victims and problem gamblers translate into increased costs to communities through their respective health, social service and justice systems.

In addition to economic benefits and costs, gambling also provides numerous non-monetary social benefits for community members such as opportunities to socialize, to engage in recreational activity, to participate in community matters, and to enhance community identity. Balanced against these social benefits are the negative effects of gambling such as deterioration in the physical and mental health of citizens and changes in the moral fabric of the community, violence and suicide.

Our focus group participants were unanimous in agreeing that gaming provided direct jobs to the community. They identified positive effects such as new enterprises, spin-off jobs and increased revenues for businesses adjacent to gaming sites (i.e., for local suppliers of gambling equipment, restaurants and shops, etc...). Our in-depth interviews with gamblers also indicated numerous positive social effects. As expected from our model, bingo players were effusive in their praise of community impacts. One regular player claimed that their fire department was "one of the best equipped fire departments outside of the metropolitan area ... all because of bingo ... its keeping our tax base down." A second reiterated "the fire department has a bingo and that pays for its trucks." A serious lottery player confirmed that bingo supported their local hockey team. "Without it [bingo] our Junior A hockey team would not exist. We made \$40,000 last year off our TV bingo." Finally a serious social casino player insisted, "We generated \$50,000 a year here for our fire department through bingo. We couldn't run our fire department [without bingo].... We have the top equipment. This is a county area where there's about ten fire departments.... We have all the key equipment and when there's a major fire, we get called for back up."

Bingo players from rural communities were less likely to link their form of gaming to job creation because it relied heavily on volunteers.

They were, however, of the opinion that casinos and video lottery terminals created employment in their respective communities. "The video lottery terminals in my town not only helped create jobs in local businesses but without them a lot of places couldn't stay open." This was also the view of lottery, casino and video lottery terminal players. A serious social lottery player who had secured a job as a lottery clerk stated "I wouldn't have been employed had this form of gaming not existed." A serious casino player reported, "I know the service clubs that I belong to and if it wasn't for the VLTs they wouldn't be able to pay their mortgages. We [members of the legion] were warned by our own treasurer, our own in-house treasurer, that we can rely on the VLTs ... because there is so much money coming in from them that it's paying the mortgage." This player further emphasized the importance of video lottery gambling to businesses in rural districts. "There isn't a country hotel or a country small bar or something like that, anywhere in Canada, that could exist without the video lottery terminals.... As a banker I can tell you that I had many hotels, out in Saskatchewan they were all in financial trouble at one time, and they all pulled themselves out because of video lottery terminals."

All types of players insisted that their gambling constituted important social contexts where they could meet with others to socialize and exchange information. As predicted, bingo and video lottery players stressed that their gaming activities provided them with a sense of social identity and community belonging. As one participant put it, "the more people you know in your community, the more you feel you belong, and playing video lottery is a chance for meeting people." Bingo and video lottery players usually played at regular sites and had a strong senses of 'insider' and 'outsider' status. Two bingo players recounted: "you see the same people every week ...all the familiar faces ....." "You see the same faces unless the jackpots are up and you see all the different faces...." A video lottery player noted the importance of belonging as well. "It takes a few months to be accepted in [our] social network", he said of us, "because we were outsiders and didn't play the machines." Casinos were seen as more "impersonal environments" where familiarity of others and a sense of community were less obvious parts or benefits of the play. Similarly, most lottery ticket players did not directly connect their play to a socially meaningful sense of community. Nevertheless, players from all focus groups claimed that gambling added to the entertainment options in

their communities, and contributed, through revenues and profits, to community development.

Our life history findings indicate that gambling provided opportunities for isolated, elderly, retired and lonely people to socialize with others. According to one serious social bingo player "I prefer bingo as it gives me an out. I live in a senior citizen' complex.... I don't drink, smoke or go to parties. I am a shy person and I don't mix with people. I go to bingo and church for my socialization." The motivation to play is not only the anticipation of the win, but the social benefits that accompany the activity. The case of a second serious social bingo player who participated in a "bingo trip" to another community is illustrative. Although the trip afforded participants frequent opportunities to gamble, this player indicated that "she was never so bored in her life." Playing bingo in a foreign location with mostly strangers was, she lamented, an entirely different experience. "At the local bingo hall, we have our own little bunch. We get to the door and just scoot straight to our seats. When bingo's being played, you don't hear too much. Anyone who does talk, they're just talking very quietly to whoever's beside them.... And then at intermission, out come the cards....and so on. But what I'm saying [bingo] is a social thing...." A third bingo player compared casino gaming with bingo. "I don't go to the casino for the social part of it because ... you sit and look at the machine and you don't do anything else. This isn't really an attraction [for me]. It's certainly different from bingo. There is no social contact at the casino. You're in there and go to a machine for company. God forbid should you speak to somebody beside you because they're so busy." Lotteries also afforded players with opportunities to choose their favorite games, bet together, and socialize, but lottery play, in general was reported to be less social than playing a 'real' game. "Scratching a bingo ticket and going to bingo are very different, unique experiences. You can't sit and you can't criticize the caller. There's no fun scratching a bingo ticket. You have to play to have fun. It's completely different."

Focus group participants had difficulty discussing the negative effects of their gambling on the community. Lottery players reported no negative effects associated with their play. Bingo and video lottery players acknowledged that they knew of players whose gambling led to social assistance, health problems, and minor crime. Video lottery players, in



particular, associated numerous social costs with their type of gambling, most notably financial losses resulting in reliance on community services. One player observed that his gambling had led to a pattern of differential association. He "dropped out" of a sports group, gambled more and started a "new set of friendships" with video lottery players. For bingo players, the only negative community impact was health related - "the high level of smoke in the halls is a hazard." Casino players emphasized economic community impacts. Some reported that casinos reshuffled spending away from other entertainment industries. Others remarked that they caused minor traffic problems. None identified casinos with crime in the community.

This latter finding was confirmed to some degree by interviews with police personnel. When the casino was first introduced in Halifax, a special twelve member unit was established in the Halifax Police Department. After tracking calls for service, for enforcement requests, and for crime related incidents for two years in the downtown core, they concluded that gambling caused no significant increases in violent or property crimes. As one officer commented "it [high visibility policing] probably kept illegal behavior in check." The small increases in minor crimes, moreover, were attributed to increased visitor traffic from conventions, conferences and special events, and not to the presence of the casino. A caveat is necessary. The spread of gambling was creating some financial problems resulting in criminal activity. In at least half a dozen cases before the courts involving fraud, arson, bank robbery, theft and breach of trust, investigators were able to establish that gambling was a prime factor. Law enforcement officers, however, emphasized that video lottery gaming rather than casinos, lotteries or bingo was the major source of gambling related crimes. "With the spread and distribution of these machines," reported one officer, "it creates a real [enforcement] problem and it would be difficult to track criminal activity related to this type of gambling."

Our life history interviews reveal a bifurcated set of findings regarding community impacts. Video lottery gaming was often reported as harmful to communities while bingo was reported as beneficial, as predicted. According to a regular lottery player "bingo benefits the community because a lot of them are run by the Kiwanis and they are raising money to help people. The Lions club [bingo] helps the community

because half the money goes back into the community. But as far as VLT's [are concerned] there is no benefit because the government is the one that gets billions of dollars and they're not there to help anybody." Similarly, an occasional video lottery player commented "I haven't been to a bingo for a long time, but seeing the enjoyment that my grandmother got out of it as far as elderly people are concerned, I think this was an activity that was enjoyable for a lot of them. VLT machines, I really don't see socially how it benefits the community. Because people ... most people go and sit there by themselves and aren't socializing with anybody. They're just in their own little world plugging their money into the machines."

Most gamblers were unable to identify negative impacts on communities. There were, however, a few exceptions. A serious social gambler reported that the reallocation and freeze on video lottery terminals was bad for local employment and contributed to inequality. "The worst thing [for communities] that could have happened was when they [government] took them out of corner stores. Many of these stores had employed people because of the video terminals... Now that they have compacted them [reallocated machines to licensed establishments and instituted a moratorium] they [government] made fewer people rich because the pub owners are the ones making all the money off it now." An occasional video lottery player remarked that the introduction of video lottery terminals displaced other forms of entertainment. "Most of the taverns and places that used to have entertainment don't any more because of their VLT machines. They're [owners] making money off the machines ... and selling drinks to the people using the machines. They don't really need the bands to draw in the entertainment anymore. And I found that as far as getting work as a musician around town, it's worse now than it ever has been."

As expected problem gamblers figure heavily in extending the social costs of gambling for communities. For those who resort to illegal activity there are criminal justice costs associated with investigation, prosecution and incarceration. For those who face emotional or physical harm there are health costs, including treatment for them and their families. For those who go bankrupt and ruin familial relations, there are enormous counseling and legal costs.



The case history of a problem bingo player is illustrative. This player was able to hide her gambling from family and friends for more than four years. "My husband had no idea ... he couldn't figure out what it was. I managed to hide my addiction very well." By borrowing from friends, making credit card advances, getting loans from banks and other financial institutions, and ultimately writing bad cheques, she was able to conceal the extent of her excessive gambling. "I always made sure that when I borrowed money from friends or family that I paid that back right away. However, if I borrowed from an institution, it didn't matter whether they got it back." Only when she turned to illegal behavior was her gambling addiction discovered. She went before the courts, was placed on probation, and then eventually ended up serving forty-one days in a local correctional center. Following her release she entered counseling services and became a recipient of social service and social assistance programs. While this case is rather extreme, it is noteworthy that half the problem players in our life history studies currently rely on legal, health and social service resources within their communities. These interviews indicate, moreover, that social impacts are often intangible and difficult to measure in monetary terms. How does one estimate the social meaning of job loss, divorce or suicide for community life?

The convenience model suggests that gambling will have differential community impacts depending upon how the gaming industry operates in respective communities. As expected, our preliminary findings suggest that bingo and charity gaming provides communities with resources they would not otherwise have. Charity gaming and its status within an ever increasing gambling marketplace raises questions about whether communities will continue to enjoy these benefits. On the other hand, lotteries and video lottery gaming provide greater employment opportunities in communities while casinos offer limited and restricted employment benefits. Problem gamblers, moreover, add substantial costs to all communities and the potential for growth in problem video lottery gaming may overshadow any revenue benefits.

It is important to try to ground research on gambling impacts in a community context whenever possible. One community-related issue which might warrant a separate study is the distribution by community or region of gaming revenue and gaming-related costs. Gambling may be disproportionately drawing money out of some communities and funneling

money to others. Research might also explore how communities could gain control over more of the benefits. Previous focus group research, for example, indicates that there will likely be more positive community benefits associated with certain forms of gambling, especially if (as in the case of bingo), they are perceived to have contributed revenues to community development programs (Alcohol and Gaming Authority, 1997).

#### **e) Governance Impacts**

At first glance, one important positive impact of gambling is that it contributes to the economy and to government revenues. As cash strapped provincial governments struggle to cope with federal transfer shortages and rising financial obligations, the spread of gambling products has been an attractive way to generate new state revenues. Additional benefits such as increased employment, business development, new tourism, tax relief, and enhanced services are expected to accompany the proliferation of gambling products and to result in a better quality of life. But economic impact studies have not addressed in a serious and meaningful way the costs associated with gambling's expansion. According to Goodman (1995: 67) "When costs were acknowledged, they were often deemed too difficult to estimate. Many of these ... reports were part of an elaborate public relations campaign ... to convince government officials, the media and the public to allow expanded gambling into their communities." Indeed, we have argued that these invisible costs must be accounted for because they have very real consequences for the economies of cities, regions and provinces.

In our focus group research, players of every type except bingo, agreed that gaming was a revenue generator which, in turn, reduced the tax burden. One participant summed it up: "an increase in revenue means you're not going to have to be taxed to the same degree." Most players also thought that gambling increased government jobs because it created a regulatory/administrative regime to promote and manage different types of play. Casino players thought that their venues attracted a "tourist population" from outside the Province which brought in money to both the economy and the government. One player insisted "It's [casino] a big draw among the cruise ships. The people on cruise ships want to go, oh yeah.." Another stated "there's people from New Brunswick and Prince Edward Island who will come every second weekend or something like

that." Most bingo, lottery and video terminal players, however, did not think that their gaming attracted a tourist population.

Focus participants were also asked about the governance costs associated with gambling. Most casino players did not think that there was a need for more state programs to educate gamblers or manage their problems. Gambling related problems, they insisted, existed whether gambling was legal or not and, in any case, medical services already existed for counseling and treatment. These services did not depend on gambling revenues and they could be extended to handle gambling problems. Lottery group participants also did not associate their gambling with governance-related costs (i.e., extra legal, policing, health and welfare costs). Bingo and video lottery players did, however, recount that their games led to additional social assistance expenditures which had to be absorbed by the local state. Policing health and legal costs, nevertheless, were not generally identified as significant impacts on government.

In our life history studies, occasional and serious social bingo players were reluctant to specify governance impacts. For them, the impacts of their play were positively related to their communities. Problem bingo players, however, singled out video lottery play as the most dangerous form of gambling for government despite the revenues it generated. The prevailing sentiment was that government was not responsive enough to excessive gambling. One problem bingo player remarked "I think because they [governments] are benefiting so much, they should be putting more back into treatment [for people] they have addicted." Another suggested that the provincial government should limit accessibility to video lottery by placing them in controlled environments like liquor distribution centers. "I don't think there is a need for ... as many as there are now....they [video lottery terminals] should be placed in some kind of arcade." Nor was the government thought to be educating people enough about the effects of gambling or providing them with adequate treatment programs. The comments of a serious social lottery player were typical "I think the devastation that [video lottery terminal gaming] has caused people is going to cost the government more money in the long run because more people get addicted. Suicide increases ... financially peoples lives are ruined, homes are lost and the government couldn't care less because they're bringing in millions and millions of

dollars, but not putting anything back into ... helping people. I think education ... should be brought into the schools ... to teach children not to gamble."

The life histories of *problem* gamblers indicate that this segment of the gaming population suffers a variety of emotional, physical and social problems, as discussed above. Not surprisingly, problem gamblers were more frequent users of government legal and health care services than were occasional/recreational or serious social gamblers.

Interviews with health care workers, drug dependency counselors, Help Line managers, law enforcement officers, financial counselors, social workers and psychiatric nurses confirm that their services are increasingly being deployed to deal with gambling related problems. A Gambler's Help Line representative indicated that calls from problem gamblers have increased regularly since their service began in December of 1996. The profile of the typical problem player using the service is a male, between the ages of 25 and 45, with an addiction to video lottery gaming. Psychiatric nurses working in assessment units also report an increase in patients with suicidal tendencies related to gambling compulsions, although many have multiple addictions. As noted, law enforcement officers intimate that gambling is adding to minor financial crime, and debt counselors warn that there are mounting government costs related to gambling.

Since many of the costs and benefits of governance seem to be related to the expenses incurred by problem gamblers, a better ethnographic understanding of these gamblers and their gambling behavior is called for. Why, for example, do some serious social players become problem players and not others? The patterns leading up to difficulties with gambling vary enormously. Bingo players may get into trouble with their play for reasons that are quite different from video lottery players. One type of gambler may be "addicted" to the social world of gambling while another may be "addicted" to the game.

It is also important to accurately estimate the costs associated with problem gamblers. In order to develop this kind of research and address public policy questions arising from it, the agencies that problem gamblers interact with need to be better able to gather relevant information and

keep records which would track and document the problems associated with diverse gaming activities.

Since our model also predicts that video lottery gaming, given its structural characteristics, adds significantly to the population of problem gamblers, it can be expected that government-incurred social costs will rise as the revenues from video lottery gaming increase as a proportion of all gambling. Are there ways video lottery gaming can be structured or regulated to maintain the attractive revenue growth while minimizing the associated governance costs?

## **VI RESEARCH IMPLICATIONS AND STRATEGIES**

This chapter outlines a series of research strategies which emerge from the present study. The order in which these strategies are presented reflects our sense of how they should be prioritized. The research projects we propose in this chapter are based on the following factors:

### **1. The Predictions of the Convenience model:**

The convenience model of gambling developed in Chapter 4 emphasizes the structure of the game (regulation, market, characteristics of play) and how this shapes social impacts both directly and indirectly by way of expected player characteristics, in each type of gaming (i.e., bingo, lotteries, video lottery terminals and casinos). This model stresses the multiple impact levels of family, workplace, community, education and governance, and uses a typology of players including occasional/recreational, serious social and problem players. The research strategies proposed in this chapter relate to the different elements of our model and their interaction. Our model suggests that some elements in the structure of the game can be manipulated to alter social impacts. In addition, our model predicts that as expected player characteristics change so too will social impacts. When the model was applied to each of the four types of gambling, specific predictions were made about the expected positive and negative social impacts (see Figures 3, 4, 5, 6).

The majority of the projects proposed below are based on this model. For example, the emphasis in the Study of Regulatory Regimes is on better understanding the causal connection between game structures and social impacts and how these can be manipulated, rather than simply

documenting impacts. Our model also led to predictions about the relative importance of positive and negative impacts across gaming venues and by type of player. For example, video lottery terminals had high predicted negative impacts, therefore the studies below focus disproportionately on video lottery terminal use. Our typology of players and the predictions of the model also raised important questions about the boundary between serious social players and problem players - how it differs by venue, with important implications for social impacts. The Serious Social Player Study is designed to further our understanding of these relationships. Finally, our model is dynamic, in the sense that the momentum of convenience gambling is toward ever more accessible and convenient forms of gaming. Transformations in the types of gaming activities have been dramatic. Given the growth, character and popularity of electronic forms of gaming, especially video lottery terminals and casino slot machines, careful and considered social research on these forms of gaming is required in order to better understand the positive and negative social effects. Furthermore, it is important to anticipate trends in gambling and their social impact implications, as proposed in the Study of the Electronic Future of Gambling.

## **2. "Best Practice" in the Literature:**

In our extensive review of the literature we were impressed by the wide variety of methods used to research social impacts. Our choice of methods has been influenced by this literature. In particular, our proposed Estimation of Social Costs Associated with Problem Gambling study draws on the methodology used by Cyrenne (1995) and Thompson (1997). Furthermore, our proposed research uses a mix of quantitative and qualitative methods. While quantitative methods are essential for deriving sound population estimates related to gambling behaviour and social impacts, in our opinion ethnographic methods have proven to be essential for probing the social context of gambling and deepening our understanding of both the social effects and the public policy implications of the spread of commercialized forms of gambling. It is our opinion that social impacts cannot necessarily all be quantified, or assigned a monetary value.

## **3. Gaps in the Literature:**

Despite the burgeoning research on gambling, significant gaps remain. We have concluded that less is known about the impact of



gambling on the workplace compared to the more heavily researched area of family impacts (i.e., financial, relationships, health). In the past, gambling was typically associated with professional gamblers, the unemployed, housewives and retirees who gambled on bingo, and with middle and upper income individuals who took lavish gambling holidays in resort destinations. Not surprisingly, perhaps, the workplace was not a site where the social effects of gambling were easily or obviously felt. Today, however in the context of convenience gambling, a large proportion of people are able to both work and gamble in the course of a normal day. A Workplace Study would add new knowledge and understanding about the social effects of gambling. Educational impacts have also been under-researched relative to other impact areas.

Furthermore, the literature is dominated by research on the social impacts associated with problem gambling. With the introduction of new gaming products and expanded gaming convenience, there has been an increase in the number of casual, occasional and serious social players whose play is not problematic. Less is known about the positive and/or negative benefits experienced by occasional or serious social gamblers. Two of our proposed projects, in particular, focus on these groups: the Serious Social Player Study, and the Study of Consumer Income/Expenditure Patterns and Gambling.

#### **4. Issues Raised in our Preliminary Fieldwork:**

The evidence from our fieldwork, as discussed in the previous chapter, confirmed many of our expectations and pointed to issues which need more research. For example, the life history interviews showed striking differences in serious social players in different types of gaming. Research on this type of player would help us understand how to promote controlled gambling (i.e., the Serious Social Player Study). The importance of video lottery gaming to social costs was also clearly demonstrated in our interviews. Therefore, many of our suggested projects focus on this form of gaming. However, given that research on this type of gaming in Nova Scotia is currently being conducted, we did not include a study aimed exclusively at video lottery gaming, but have chosen to highlight it within several of our proposed studies (i.e., the Study of Regulatory Regimes, the Electronic Future Study, the Workplace Study, the Serious Social Player Study). Based on our fieldwork, we have concluded that a community-based approach should be used where

possible in researching social impacts, which is reflected in our methods. As well, gender and age differences emerged as important in understanding the effects of gaming and must be part of any investigation into social impacts. For example, our life history interviews raised concerns about the impact of parental gambling and adolescent gambling on education.

In this chapter we provide a "road-map" of research needs based on the above factors. The "road-map" consists of research projects which explicate: (a) the causal links identified between the structure of the game and social impacts (i.e., the Study of Regulatory Regimes, the Study of the Electronic Future of Gambling, the Serious Social Player Study); (b) the consumption benefits derived for the majority of people, for whom gambling is another entertainment option (i.e., the Study of Consumer Income/Expenditure Patterns and Gambling; the Study of Winners); (c) the social costs of gambling which are concentrated among the relatively few problem players (i.e., the Estimation of Social Costs Associated with Problem Gambling); (d) the gaps in the literature that have been identified (i.e., the Workplace Study, the Serious Social Player Study, the Educational Impact Study); and (e) important impact areas in our typology of social effects (i.e., Study of Gambling Revenue by Community/Region, Educational Impact Study).

Our road-map does not claim to be comprehensive. We have not listed all possible projects emanating from our model. Furthermore, some of the projects are better developed than others. We concentrated more time and effort on those projects we felt were most urgent and compelling. To that end, our project descriptions and discussion of research methods reflect our priorities. We have tried to be especially detailed in outlining the first few projects. While we have mapped other important studies, we have not been as complete in our account of them. These would need further methodological expansion and refinement in consultation with the Alcohol and Gaming Authority should they be selected.



## SUGGESTED PROJECTS

### 1. Study of Regulatory Regimes:

In relation to the Structure of the Game, more research is needed on different regulatory regimes and social impacts. A series of case studies on different types of gambling is proposed. Of the studies suggested below, the priority ones are the Video Lottery Terminal and Casino Studies. Given this, our methods for the lottery and bingo studies are less well developed.

**a) Video Lottery Terminal Study:** The government is under increasing pressure to act to reduce the perceived negative impacts of video lottery terminal gaming. In response to this pressure a moratorium on the number of video lottery terminals operating within the province was introduced. Presently, the issue is how will the fixed number of video lottery terminals be allocated in a growing market? In the past, the number of video lottery terminals has grown in response to market demand, subject, of course, to various regulations related to venue characteristics such as square footage. With the introduction of a moratorium a method will have to be devised to allocate a fixed number of video lottery terminals among competing operators. The method of allocation will affect whether the moratorium has the desired effect of limiting the growth of video lottery-related gambling problems. Will the experience of limiting video lottery terminals be similar to that of limiting licenses in the fishing industry? When a freeze was placed on the number of fishing licenses, fewer operators fished more intensively. If video lottery terminals are allocated to the most "productive" sites, problem play may increase, not decrease. The allocation of video lottery terminals may be a politically sensitive issue.

There are other forms of regulatory intervention which should be considered to reduce the harmful effects of video lottery terminal gaming. Our model suggests that changing the characteristics of play, or type of venue has the potential to attract a broader range of players. Another way of restricting or limiting access, for example, is to license players, not establishments. This project will research the potential impacts of alternative regulatory responses on the net social impact of video lottery play.

**Methods:** The method of assigning video lottery terminals to operators will be reviewed and monitored in the wake of the present moratorium. The location of video lottery terminals will be tracked based upon factors such as geography, intensity of use, revenue generation, type of location, and so on. Trends in overall levels of revenue, and prevalence rates of video lottery play will be evaluated. This will be supplemented by interviews with establishment owner/operators and social service providers about the impact of the moratorium. This research will address the issue of how the moratorium affects the distribution of occasional/recreational, social serious and problem players which, in turn, affect social impacts.

Other forms of regulatory interventions, such as the Atlantic Lottery Corporation's efforts to alter the characteristics of play in order to broaden the player base of video lottery gaming will be examined and compared with other jurisdictions. Interventions such as methods to license players and monitor or limit play will be explored with knowledgeable industry and service personnel.

**b) Casinos:** Unlike other provincial jurisdictions, Nova Scotia has chosen a regulatory regime involving the granting of a monopoly to a private company. This arrangement has added to the controversy over casino gambling and has major implications for social impacts on "governance," including political controversy, control of revenues and loss of regulatory control (as a result of demands from private sector interests). The objective of this case study is to reveal how social impacts are affected by different regulatory regimes or options. A comparative approach will be used involving other jurisdictions in which casinos are government owned.

**Methods:** The development of casinos in Nova Scotia will be reviewed, through document analysis and key informant interviews, focusing on the regulatory framework, negotiations, and the controversy over the terms of agreement with ITT Sheraton. This will be compared with other jurisdictions in Canada where different approaches were taken, using documentary evidence and key informant interviews. Indicators will be developed to show the impact of these different structures on player

profiles, reported social impacts, public acceptance and government revenues.

**c) Bingo:** Bingo is the most decentralized, and minimally regulated gaming activity discussed in our conceptual model. While the perception among players and the general public is that bingo contributes significant funds to communities, the question remains are communities benefiting as much as they could? Is there, for example, loss of revenue in bingo due to illegal activity? Is the money accounted for? Is more or less regulation needed to maximize the social and monetary benefits communities receive from bingo? Is there a model of community control that has application to other games? Should a share of bingo revenues be going directly to government?

**Methods:** Key informant interviews with government officials, representatives of charity organizations and community leaders will form the basis of this project. Case studies will be used to document how bingo revenues contribute to a community under different organizational forms. In addition, approaches used in other jurisdictions will be reviewed and compared.

**d) Lotteries:** The main regulatory issues identified in our model involving lotteries surround revenue sharing formulas. Since costs predicted by our model are expected to be minimal, the key issue is the distribution of benefits. Can more money be returned to the communities which generate the revenues? Should spending be targeted and made more visible? Interactive in-home gaming is seen as a primary growth area for lotteries. The convenience model predicts that lotteries will have to move in the direction of using leading-edge technology to maintain or improve their market share. Therefore, the future of internet lotteries and how to regulate them is an important area that requires study. This overlaps with the Electronic Future of Gambling Study.

**Methods:** The revenue sharing formulas regarding lottery products will be reviewed and different stakeholders will be interviewed. The distribution of lottery revenues by geographical region will be investigated and compared with government spending by region. The experiences of other jurisdictions with targeting lottery revenues will be reviewed and implications for Nova Scotia will be drawn.

## **2. Estimation of Social Costs Associated with Problem Gambling:**

Much of the literature suggests that the main social costs of gambling are concentrated in a relatively small population of problem gamblers. While our approach emphasizes that costs, as well as benefits may be incurred across the full range of gambling behaviors, our model predicts that problem gamblers will generate substantially higher costs than serious social or occasional/recreational players. It would be beneficial to calculate in monetary terms the most obvious social costs associated with problem gambling. Such a study certainly would make a useful contribution to the public debate on the cost of problem players in Nova Scotia. Such calculations could be used to discount revenue figures for the most obvious costs associated with gambling. We caution, however, that such a study would not be able to measure the total costs across all types of gamblers, nor even the full range of costs associated with problem players.

The objective of this study, then, is to provide reasonable estimates of the social costs associated with problem gambling which are most prominent in the public debate. The lack of rigorous estimates contributes to the ongoing political controversy surrounding the expansion of gambling. It must be emphasized that this study is not designed to measure total net social benefits, as has been attempted in some jurisdictions, but rather to focus only on those costs which can be clearly documented. A second objective of such a study is to identify missing data and propose methods of data collection which would be vital in estimating social costs.

**Methods:** We can derive reasonable estimates of the social costs of problem gambling in Nova Scotia by combining existing prevalence data estimating the number of problem gamblers in the province with new data on average costs incurred per problem gambler. This approach draws on the methodology deployed by Thompson et al. (1997) in their social cost research.

We propose conducting a survey of problem gamblers (drawn from a population such as Gamblers Anonymous) and determining the impact of their gambling across the dimensions of family, workplace, education, community and governance as outlined in our model. For example, the extent of lost work time, debt, job loss, divorce, and use of

services including legal, criminal justice, health, social welfare, and addiction treatment, will be documented. Cost estimates for these impacts will be based on information provided by relevant services and institutions such as police (i.e., the average cost of investigating gambling related cases), courts (i.e., the average cost of processing a case of theft through the courts), corrections (i.e., the average cost of incarcerating convicted gamblers), therapy (the average in-patient costs), social services and so on. These costs will then be aggregated to determine the average cost per problem gambler in our sample. Once we have the per gambler cost estimates, we will extrapolate those costs to arrive at an annual estimate for the total population of problem gamblers as determined by provincial prevalence rates. This type of study might also allow for social costs to be refined along dimensions such as gender, age, and socio-economic status as well as by type of gambling activity.

In order to track changes over time estimates of social costs should be compiled annually. This would require that government agencies collect reliable information which can form the basis for such longitudinal studies. We will investigate the financial, legal and other barriers to collecting such data and propose record keeping methods to insure adequate information is compiled and made available for future research.

### **3. Study of Consumer Income/Expenditure Patterns and Gambling:**

According to the convenience model, the expansion of gambling has been fueled by the general increase in discretionary consumer spending. Its growth partly reflects consumer spending choices in an increasingly service oriented economy. Gambling can continue to grow as long as overall consumer spending rises or as long as it is able to increase its proportion of available consumer dollars. Positive social effects arise from the enjoyment of the gambling product. The great majority of gamblers experience these positive "consumption" benefits and little or no negative effects. Social costs emerge when gambling siphons off money or time which are normally used for non-discretionary purposes (i.e., money for necessities, or time usually spent on paid work, child care or school work). Social impacts may also be associated with changes in how discretionary time or money are spent (i.e., playing video lottery terminals rather than sports, visiting a casino rather than attending the

theater), although these changes would not typically be revealed in a calculation of net benefits.

A detailed study of consumer income and expenditure patterns, therefore, would contribute greatly to an understanding of the positive benefits of gambling for consumers and the "opportunity costs" of gambling expenditures overall. Such a study would be particularly important for increasing our understanding of the vast majority of gamblers who are in control of their gambling. The objectives of the study would be: (a) to better understand trends in gambling expenditure in relation to other forms of consumer spending, sources and growth of income, and sources and levels of debt; (b) to evaluate distributional issues related to gambling expenditures as they may relate to costs and benefits of gambling; and (c) to develop measures of the net consumption benefits derived from gambling. The results of this research are needed in order to inform public debate on the social impacts of gambling which, until now, has been dominated by the issue of problem gambling.

**Methods:** An analysis of consumer income and expenditure data will be undertaken to explore the nature of convenience gambling and how it operates as a form of consumption for the vast majority of people who participate in gambling. This can be done using the Survey of Family Expenditures (renamed the Survey of Household Spending in 1997). Both the benefits of gambling as entertainment/recreation, and costs in terms of the displacement of income from other discretionary spending or from basic necessities can be analyzed by using this survey. Preliminary work using this data source has been undertaken by Statistics Canada (Marshall, 1996; 1998). If possible, more detailed analysis of the Nova Scotia or Atlantic region sample will be undertaken (this is being investigated with Statistics Canada). This survey has information on household demographics, sources and levels of income, detailed expenditures, including four types of gambling (since 1996), and amounts won from gambling. As well, questions on type and level of debt, changes in assets, and health-related spending may give an indication of gambling-related costs. Both descriptive and analytical methods will be used to better understand the consumption of gambling products and patterns of expenditure (and debt) related to different types of games, other entertainment expenditures, and levels of income.

Another analytical approach is to use the annual population survey data, collected by the Alcohol and Gaming Authority, to understand the demographic trends and spending patterns of the gambling population of the Province. This survey contains information on incomes and expenditures by gaming activity. The raw data in this survey could be analyzed in more detail with the objective of examining distribution patterns and using more analytical techniques to test relationships among variables. The data could be analyzed to answer questions about the distribution of expenditures on gambling. For example, the decile distribution of gambling expenditures could be calculated to show what share of gambling expenditures are accounted for by the top ten percent of the gambling public.

A supplementary approach that we also recommend is to add questions about social impacts to one round of the Alcohol and Gaming Authority's annual population survey. This would be more economical than undertaking an entirely separate population survey, as was envisaged in our original proposal. Such data could then be analyzed taking advantage of prevalence data already collected. The basic survey questions asked each year should be standardized so that changes over time can be carefully monitored.

#### **4. Serious Social Player Study:**

Our typology of players distinguishes between serious social and problem players, with the largest social costs associated with the latter group. Evidence suggests that many players are able to maintain a high level of serious social gambling without major disruption to their lives. However, evidence also suggests that some people move from serious social gambling to problem gambling. Our ethnography interviews also showed that it is possible for some problem players to move back to serious social levels of play. Our model suggests that the likelihood of moving from serious social to problem play depends on the structure of the game. In particular, the two games with the highest predicted numbers of serious social players are bingo and video lottery terminals, with video lottery players predicted to face the most risk of becoming problem players. We also predict different social impacts from serious social play between the two venues, given the differences in the structure of the games and the expected clientele. Bingo is publicly perceived as a benign form of gambling, while video lottery terminals are associated



with high social costs - yet there are many committed serious social bingo players who spend large amounts of money on the game. Are there social costs which are hidden in households and communities?

We propose a detailed study of serious social bingo players and video lottery players. The objectives would be (a) to test our expectations about why these differences exist; (b) to better understand the movement between serious social and problem play; (c) to study self management strategies and how they can be facilitated in particular venues; and (d) to investigate whether social impacts of bingo may be less visible and therefore underestimated.

**Methods:** Secondary data sources on these two types of players will be analyzed and reinterpreted in light of the above questions (i.e., prevalence studies, expenditure data, service agency statistics, etc...). In-depth interviews with a larger sample of serious social and problem players, using snowball sampling techniques, will enable the preliminary findings from our ethnographic interviews to be generalized. These interviews will be carried out in particular community settings to control for other variables. An alternative, but more expensive method would be to do a large telephone survey in selected communities. In addition, interviews will be conducted with service providers and gaming venue operators in these communities.

## **5. Study of the Electronic Future of Gambling:**

In the convenience model the market is by definition largely limited to the local population. Growth in the market comes by encouraging more of the population to gamble, or by spending more money on developing new and attractive gambling products. Thus, gambling products are made ever more accessible. Video lottery terminals are the leading edge of an electronic revolution in gambling products. As with video lottery terminals, electronic gaming offers the possibility of continuous, rapid play and the potential for quickly getting into trouble. The Atlantic Lottery Corporation is already exploring the possibility of becoming involved in internet gambling. One can easily envision a future where gambling venues are virtual, not physical - where people bet on simulated horse races and gamble at virtual casinos.



Our model has stressed the relationship between the structure of the game, including regulatory aspects and characteristics of play, and the ensuing social impacts. Electronic gambling has the potential to dramatically alter the structural characteristics of games. Furthermore, in most cases a range of alternatives exists for delivering electronic games to consumers, which will have implications for social impacts. For example, electronic arcades could offer a range of gaming options, from casino-type games to horse racing, or alternatively electronic gambling could be done in the privacy of one's own home through cable networks or the Internet. Electronic technology also has the potential to alter how gambling is regulated, including limiting access and monitoring players.

Given that electronic gaming represents the future of convenience gambling, it is important to anticipate the implications for social impacts. The objectives of such a study include: (a) understanding the options for delivery of electronic gaming products and the implications of each for expected player characteristics and social impacts; (b) identifying regulatory options related to access, limits to play, marketing, and so on, including exploring the potential use of electronic means to license and monitor players; and (c) proposing mechanisms for minimizing the negative social impacts and maximizing the benefits of electronic gaming.

**Methods:** This is an exploratory study. The emerging literature on Internet gaming will be reviewed. Interviews will be conducted with industry participants involved in the development and promotion of electronic gaming (such as Atlantic Lottery Corporation) and with other experts. Alternative delivery and regulatory scenarios will be developed and discussed with service providers and industry representatives in terms of their implications for player characteristics and social costs. Focus group discussions with players will also be used to provide feedback.

## **6. Workplace Study:**

Our conclusion after reviewing the relevant literature, interviewing experts, and conducting focus groups is that less is known about the impact of gambling on the workplace than any other impact level. However, in the context of the growth of convenience gambling, a large proportion of people are able to both work and gamble in the course of a normal day. Urban casinos exist alongside office towers, lottery products are sold in kiosks at work sites, video lottery machines are

dispersed in nearby bars, lounges and restaurants, and bingo is held daily after work. We anticipate that workplace impacts will be of increasing importance.

While our model does not predict strong negative workplace impacts, other than for problem gamblers, especially those involved with video lottery terminals and casinos, our ethnographic interviews suggest that workplace impacts may be under-recognized by professionals and in the literature. Issues were also raised in our life histories about the role of employers in identifying and helping problem gamblers.

The objectives of this study are (a) to document positive and negative effects of gambling on the workplace; (b) to examine differential impacts by industry, occupation, gender, as well as type of gaming; and (c) to assess approaches to dealing with gambling-related problems in the workplace.

**Methods:** A survey of workplaces will be conducted to uncover the extent of, and trends in, positive and negative social effects of gambling as experienced by employers in the workplace. Differential impacts by industry, occupation, socio-economic characteristics of workers, and type of gaming will be analyzed. This will be supplemented by in-depth interviews with employees to better understand the culture of gambling in the workplace and the positive and negative impacts that gambling has on work productivity, work morale and workplace cooperation and relations. In keeping with our model, differences by type of game and typology of gambler will be highlighted. Key informant interviews will be used to examine the role of employers in detecting and helping problem gamblers.

## **7. Study of Winners:**

While gambling is undertaken in the hope of winning money, most discussions of social impacts focus on the monetary losses associated with gambling. What is the impact of winning? This would vary by venue, given the differences in amounts which can be won. Are the impacts always positive? Our ethnographic interviews suggested that early wins were often a motivating factor in people intensifying their gambling. Learning more about winners would shed light on motivations of gamblers and the differences among games. The literature suggests that bingo

winners use the money for "treats" for themselves or their families. Video lottery players, on the other hand, tend to put their winnings back into the game.

Studying strategies around winning would also give insight into the management techniques or strategies people use to maintain controlled gambling and the manner in which game design interacts with these strategies. Our model suggests that characteristics of the game (including the odds of a win, size of wins, and how the win is paid out) will affect player characteristics and behaviour, and thus social impacts. For example, progressive payouts in slot machines encourage maximum wagers; the credit system on video lottery terminals encourages playing your winnings rather than cashing out; and lotteries invite you to share in the dream of the "big win," rather than offering smaller wins for more people.

The objectives of a study of winners are: (a) to understand how winnings are used by players in each venue and the social impacts of winning; (b) to improve knowledge of how winning affects later gambling behaviour; (c) to evaluate how the structure of each game around payouts affects gambling behaviour and ensuing social impacts; and (d) to identify ways to minimize negative impacts related to winning.

**Methods:** We propose case studies of major winners in each gaming venue. Through the auspices of Atlantic Lottery Corporation big lottery winners will be asked to participate in the study. For other types of gambling, snowball sampling techniques and participant observation research will be used to identify winners. Industry officials and operators in each venue will also be interviewed regarding the structure of wins and how this relates to marketing strategies, gambling behaviour and ensuing social impacts.

## **8. Study of Gambling Revenue by Community/Region:**

The convenience model emphasizes that the proliferation of gambling is increasingly dependent upon a local customer base, making gambling a pervasive feature of community life. The social benefits and costs of convenience gambling have dramatic impacts on those

communities. Important questions relate to the distribution of costs and benefits within and between communities.

As noted earlier, transformations within the structure of the gambling marketplace suggest that the role of charity gaming may be changing and with it the importance of the volunteer sector in many local communities. How will such changes impact on social services within communities? As more gambling revenues go directly to government, it is not entirely clear how such revenues are aiding local communities. Is there a shift occurring whereby there is a net drain of income from communities/regions to the provincial government, or at least a redistribution among communities?

We propose a study of the distribution of gambling revenues and expenditures across communities/regions, disaggregated by type of gaming where possible. The objective is to trace the gambling dollar from the communities in which it is raised. This will allow us to observe more clearly community/regional effects of the convenience gambling economy.

**Methods:** Data for this study may be difficult to acquire. Information is needed on gaming revenues disaggregated to an appropriate local level. To the best of our knowledge, much of the information on the geographical origin of revenues is available from the Atlantic Lottery Commission and the Alcohol and Gaming Authority of the province of Nova Scotia. Information on the social benefits that are returned to communities/regions in the form of government expenditures would have to be acquired or estimated. While this project is conceptually very important, significant questions remain about whether the information required is available. Depending on data availability, estimates will be made of the flow of gambling spending, and its net impact on particular communities (or types of communities, such as rural versus urban).

## **9. Educational Impact Study:**

There has been little research conducted on the educational impacts of gambling. Our focus group and life history findings also suggest that the impacts of gambling on education are not that well understood apart from their effects in supplementing academic or institutional resources. Research needs to be undertaken that explores how the growth of convenience gambling may be creating a new generation of problem gamblers, particularly in light of the spread of electronic gaming

and the marketing of gaming products to younger players. How is adolescent gambling affecting education? What impact does parental gambling have on children's school performance? Can regulatory changes minimize negative impacts of gambling on education? With the growth of convenience gambling, what role can educational institutions play in teaching responsible gambling behavior?

**Methods:** This is an exploratory project. Interviews will be conducted with educators, parents and students, in both public and post-secondary institutions. Important questions include trends in adolescent gambling, extent of student problems related to own or parental gambling, the role of educational institutions in teaching responsible gambling, and the role of regulation in minimizing the negative impacts of gambling on education.

In conclusion, the convenience model of gaming developed in this phase of our research provides a framework to systematically investigate the multi-faceted issue of social impacts. By linking structural characteristics of each game to typologies of players and ensuing positive and negative social impacts, the model guides the identification and prioritization of needed research. Some projects are designed to clarify the causal links between the structure of gambling, player characteristics and social impacts, and will therefore give insights into how negative social impacts can be minimized and the social benefits of gambling more fully realized. Other projects attempt to document, or quantify costs and benefits. Some projects focus on specific impact areas, and will be of interest to particular constituencies, while others are broader in scope. In year two of this research endeavor, we look forward to implementing a subset of these projects.

## ENDNOTES

- (1) This gaming wager figure does not include the amount paid out in prizes.
- (2) These revenue figures do not include the income guarantee to the Province which for the year 1996-97 was an additional \$8, 351,805.
- (3) This figure does not include the additional revenue of \$8,351,805 which was provided to the government of Nova Scotia as an income guarantee by ITT Sheraton for casino operations.
- (4) The latest revised figure is now approximately 3200 video lottery terminals in Nova Scotia.
- (5) This most recent gaming activity refers to activities conducted by Nova Scotia First Nations subject to agreements signed with the Nova Scotia Gaming Corporation on behalf of the Province.
- (6) Depending on which calculation one adopts, this percentage represents a decline of 2.2 percent or alternatively a decline of 0.2 percent from 1995-96.
- (7) Professor Garry Smith, in conjunction with Wynne Resources of Alberta, is conducting a study of illegal gamblers in that Province.

## BIBLIOGRAPHY

Abbott, Douglas A. and Sheran L. Cramer (1993). "Gambling Attitudes and Participation: A Midwestern Survey." Journal of Gambling Studies 9(3, Fall): 247-263.

Abt, Vicki and James F. Smith (1983). "On the Social Implications of Commercial Gambling: Is Gambling Just Another Form of Play?" Arena Review 7(3, November): 17-28.

Abt, Vicki, Martin C. McGurrin and James F. Smith (1984). "Gambling: The Misunderstood Sport-A Problem in Social Definition." Leisure Sciences 6(2): 205-220.

Abt, Vicki and Martin C. McGurrin (1989). "Toward a Social Science of Addiction: A Critical Analysis of the Disease Model of Addictive Gambling." Sociological Viewpoints 5(1, Fall): 75-86.

Abt, Vicki (1996). "The Role of the State in the Expansion and Growth Commercial Gambling in the United States." J. McMillen (ed.), Gambling Cultures Studies in History and Interpretation. London: Routledge: 179-198.

Alcohol and Gaming Authority (1997). Annual Gaming Report, 1996-7. Dartmouth, Nova Scotia: Nova Scotia Alcohol and Gaming Authority.

Anders, Gary C. (1997). "Estimating the Economic Impact of Indian Casino Gambling: A Case Study of the Fort McDowell Reservation." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 233-246.

Andersen, Arthur (1996). Economic Impacts of Casino Gaming in the United States: Macro Study, American Gaming Association. 1.

Arcuri, Alan F., David Lester and Franklin O. Smith (1985). "Shaping Adolescent Gambling Behavior." Adolescence 20(80, Winter): 935-938.

Baseline Market Research Ltd. (1996). Final Report 1996 Prevalence Study on Problem Gambling in Nova Scotia. Halifax: Nova Scotia Department of Health.

Black, Errol (1996). "Gambling Mania: Lessons From the Manitoba Experience." Canadian Public Administration 39(1, Spring): 49-61.

Brenner, Gabrielle A. (1986). "Why Do People Gamble? Further Canadian Evidence." Journal of Gambling Behavior 2(2, Fall/Winter): 121-129.

Brenner, Gabrielle A. and Reuven Brenner (1991). "Gambling: Shaping an Opinion." William Eadington (ed.), Gambling and Public Policy: International Perspectives. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 481-498.

Brenner, R. and Brenner G. A. (1990). Gambling and Speculation: A Theory, a History, and a Future of Some Human Decisions. New York: Cambridge University Press.

Brown, Beverly A. and Daniel J. Brown (1994). "Predictors of Lottery Gambling Among American College Students." The Journal of Social Psychology 134(3, June): 339-347.

Buchta, Richard M. (1995). "Gambling Among Adolescents." Clinical Pediatrics 34(7, July): 346-348.

Campbell, Colin S. and J. Rick Ponting (1984). "The Evolution of Casino Gambling in Alberta." Canadian Public Policy 10(2): 142-155.

Campbell, Colin S. (1991). "Book Review: Gambling and Speculation: A Theory, A History, and a Future of Some Human Decisions." Canadian Public Policy 17: 122-123.



Campbell, Colin S. (1997a). "Charity Gaming in Western Canada." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 151-160.

Campbell Colin S. (1997b). "Under the Halo of Good Causes." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 607-620.

Campbell, Felicia (1976). "Gambling: A Positive View." William Eadington (ed.), Gambling and Society: Interdisciplinary Studies on the Subject of Gambling. Springfield, Illinois, Thomas: 218-228.

Canmac Economics Ltd. (1976). Nova Scotia Gaming Industry: An Economic Overview. Halifax.

Canmac Economics Ltd. (1997a). Nova Scotia Gaming Industry Overview. Halifax.

Canmac Economics Ltd. (1997b). Nova Scotia VLTs: An Economic Impact Statement. Halifax.

Chang, Seemoon (1996). "Impact of Casinos on Crime: The Case of Biloxi, Mississippi." Journal of Criminal Justice 25(5): 431-436.

Clotfelter, Charles T. and Philip J. Cook (1989a). The Demand for Lottery Products. Cambridge, MA: National Bureau of Economic Research.

Clotfelter, Charles T. and Philip J. Cook (1989b). Selling Hope: State Lotteries in America. Cambridge, MA: Harvard University Press.

Custer, Robert and Harry Milt (1985). When Luck Runs Out: Help For Compulsive Gamblers and Their Families. New York: Facts On File Publications.

Cyrenne, Philippe (1995). An Analysis of the Net Social Benefits From Legalized Gambling in the Province of Manitoba. Winnipeg, Manitoba: Department of Economics, University of Winnipeg.

Dense, Jeff. (1997). "State Lotteries and Public Policy: An Appraisal." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada.

Dixey, Rachael (1987). "It's a Great Feeling When You Win: Women and Bingo." Leisure Studies 6(2): 199-214.

Dixey, Rachael (1996). "Bingo in Britain an Analysis of Gender and Class." J. McMillen (ed.), Gambling Cultures: Studies in History and Interpretation. New York: Routledge:136-151.

Dombrink, John (1996). "Gambling and the Legislation of Vice" J. McMillen (ed.), Gambling Cultures: Studies in History and Interpretation. New York, NY: Routledge.

Draper, Diane and Cecilia Johnson (eds.) (1997). Gambling and the Family, Conference Proceedings. Iowa State University: College of Family and Consumer Services.

Eadington, William R. (1994). Understanding Gambling. Ninth International Conference on Gambling and Risk Taking, Las Vegas, Nevada.

Eadington, William R. (1995a). "Economic Development and the Introduction of Casinos: Myths and Realities." Economic Development Review 13(4, Fall): 51-54.

Eadington, William R. (1995b). "The Emergence of Casino Gaming as a Major Factor in Tourism Markets". R. Butler and D. Pearce (eds.), Change in Tourism: People, Places, Processes. New York, NY: Routledge: 159-186.

Eadington, William R. (1996). "The Legalization of Casinos: Policy Objectives, Regulatory Alternatives, and Cost/Benefit Considerations." Journal of Travel Research 34(3, Winter): 3-8.

Eadington, William R. (1998b). "Contributions of Casino Style Gambling to Local Economies." Forthcoming in the Annals of the American Academy of Political and Social Sciences:1-13

Eadington, William R. (1998a). Indian Gaming and the Law. Reno: University of Nevada.

Evart, Candace (1997). "Casino Gaming and the Unwary Host Community - Lessons Learned." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 319-333.

Fisher, Susan (1993a). "Towards a Sociological Understanding of Slot Machine Gambling in Young People." William Eadington and Judy Cornelius (eds.), Gambling Behavior and Problem Gambling. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada, Reno: 395-403.

Fisher, Susan (1993b). The Use of Slot Machines by Young People in the U.K.: The Present Evidence. William Eadington and Judy Cornelius (eds.), Gambling Behavior and Problem Gambling. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 405-430.

Fisher, Susan (1994). "Identifying Video Game Addiction in Children and Adolescents." Addictive Behaviors 19(5): 545-553.

Fisher, Sue and Mark Griffiths (1995). "Current Trends in Slot Machine Gambling: Research and Policy Issues." Journal of Gambling Studies 11(3, Fall): 239-247.

Gagnon, Lysanne (1994). "The Pitfalls of Using Human Greed to Fuel the Economy." Toronto: Globe and Mail, July 23, p. D3.

Gfeller, B. M. (1994). A Profile of VLT Gamblers in Brandon Manitoba. Brandon Crime Prevention Committee.

Giacopassi, David and B. Grant Stitt (1993). "Assessing the Impact of Casino Gambling on Crime in Mississippi." American Journal of Criminal Justice 18(1): 117-131.

Goldman, Jeff (1997) "The Economic Impacts of the California State Lottery on a Rural Area in California." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada.

Goodman, Robert (1995). The Luck of Business: The Devastating Consequences and Broken Promises of America's Gambling Explosion. New York, NY, The Free Press.

Govoni, Richard, Nicholas Rupcich and G. Ron Frisch (1996). "Gambling Behavior of Adolescent Gamblers." Journal of Gambling Studies 12(3, Fall): 305-317.

Grant, Scott (1998). "Atlantic Lottery Corporation 1998 Market Overview"(Calendar Quarters 1 and 2.) Moncton:, Market Research and Development, ALC.

Griffiths, Mark D. (1989). "Gambling in Children and Adolescents." Journal of Gambling Behavior 5(1, Spring): 66-83.

Griffiths, Mark D. (1990). "Addiction to Fruit Machines: A Preliminary Study Among Young Males." Journal of Gambling Studies 6(2, Summer): 113-126.

Grinols, Earl L. (1995). "Gambling as Economic Policy: Enumerating Why Losses Exceed Gains." Illinois Business Review 52(1, Spring): 6-12.

Grinols, Earl L. and J.D. Omorov (1996). "Who Loses When Casinos Win?" Illinois Business Review 53(1, Spring): 7-11.

Hakim, Simon and Andrew J. Buck (1989). "Do Casinos Enhance Crime?" Journal of Criminal Justice 17: 409-416.

Henriksson, Lennart E. (1996). "Hardly a Quick Fix: Casino Gambling in Canada." Canadian Public Policy XXII(2): 116-128.

Herring, Mary and Timothy Bledsoe (1994). "A Model of Lottery Participation: Demographics, Context, and Attitudes." Policy Studies Journal 22(2, Summer): 245-257.

Hira, Tahira, Kyra Monson and Cindy Ingram (1997). "Extent of Credit Card Debt Among Gamblers." Diane Draper and Cecilia Johnson (eds.), Gambling and the Family. Conference Proceedings. Iowa State University: College of Family and Consumer Sciences.

International Gaming and Wagering Business (1997). "North American Gaming Report 1997." International Gaming & Wagering Business 18(7, July): S3, S32-S38.

Jacobs, Durand F. (1986) "A General Theory of Addictions; A New Theoretical Model." Journal of Gambling Behavior 2:15-31.

Jones, Thomas (1997). "Do State Lotteries Enhance the Financing of Public Education?" William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada.

Kallick-Kaufmann, Maureen (1979). "The Micro and Macro Dimensions of Gambling in the United States." Journal of Social Issues 35(3): 7-26.

Kaplan, H. Roy (1984). "The Social and Economic Impact of State Lotteries." Annals of the American Academy of Political and Social Sciences 474(July): 91-106.

King, Kim M. (1985). "Gambling: Three Forms and Three Explanations." Sociological Focus 18(3, August): 235-248.

King, Kim M. (1990). "Neutralizing Marginally Deviant Behavior: Bingo Players and Superstition." Journal of Gambling Studies 6(1, Spring): 43-61.

LaFramboise, Donna (1998). "Governments and Gambling: Long Armed Bandits." Toronto: Globe and Mail, February 21, Section D.

Ladouceur, Robert and Chantal Mireault (1988). "Gambling Behaviors Among High School Students in the Quebec Area." Journal of Gambling Behavior 4(1, Spring): 3-12.

Lesieur, Henry R. and R. Klein (1987). "Pathological Gambling Among High School Students." Addictive Behaviors, 12:129-135.

Lesieur, Henry R. and Jerome Rothschild (1989). "Children of Gamblers Anonymous Members." Journal of Gambling Behavior 5(4, Winter): 269-281.

Lesieur, Henry R. (1989). "Experience of Employee Assistance Programs with Pathological Gamblers." The Journal of Drug Issues 19(4): 425-436.

Lesieur, Henry R. (1992). "Pathological Gambling, Work, and Employee Assistance." Journal of Employee Assistance Research 1(1, Summer): 32-54.

Livernois, J. (1987). "Redistributional Effects of Lotteries: Evidence from Canada." Public Finance Quarterly (15):339-351.

Long, Patrick and Yong-Soon Kang (1997). "Impacts of Limited-Stakes Casino Gambling on Resident Satisfaction with Community Life." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 367-376.

MacIsaac, Merle (1994). "Winner Takes Nothing." Canadian Business 67(May): 36-39, 42.

Marfels, Christian (1995). Casino Gaming in Nova Scotia: Staking a New Territory. Cambridge, U. K.: First European Conference on Gambling Studies and Policy Issues.

Marfels, Christian (1997). "Casino Gaming and VLT Gaming: Substitution Effect or Supplementation Effect?" Gaming Law Review 1(3): 333-339.

Marshall, Katherine (1996). "A Sure Bet Industry." Perspectives on Labour and Income Statistics Canada Catalogue #75-001(Autumn): 37-41.

Marshall, Katherine (1998). "The Gambling Industry: Raising the Stakes." Perspectives on Labour and Income, Statistics Canada Catalogue #75-001-XPE (Winter): 7-11.

Marshall, Katherine (1998a). "Games of Chance" Family Expenditures in Canada 1996. Statistics Canada Catalogue #62-555-XPB Irregular (July): 32-39.

McMillen, Jan, (ed.) (1996). Gambling Cultures: Studies in History and Interpretation. New York, NY: Routledge.

McMillen, Jan (1997). "Social Priorities in Gaming Policy: Studies From Two Australian States." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 103-126.

Meyer, Gerhard and Thomas Fabian (1993). "Pathological Gambling and Criminal Behavior." William Eadington and Judy Cornelius (eds.), Gambling Behavior and Problem Gambling. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada: 517-529.

Mok, Waiman P. and Joseph Hraba (1991). "Age & Gambling Behavior: A Declining and Shifting Pattern of Participation." Journal of Gambling Studies 7(4, Winter): 313-336.

National Council of Welfare (Winter, 1996). Gambling in Canada. Ottawa: Ministry of Supply and Services.

Newman, Otto (1972). Gambling: Hazard and Reward. London: Athlone Press.

Nova Scotia Department of Health, Drug Dependency Services and Nova Scotia Department of Education and Culture (1997). Drawing the Line: A Resource for the Prevention of Problem Gambling. Halifax, Nova Scotia: Nova Scotia Department of Health, Drug Dependency Services.

Nova Scotia Department of Health, Drug Dependency Services (1998). Nova Scotia Video Lottery Players' Study Highlights 1997/98. Halifax, Nova Scotia: Nova Scotia Department of Health, Drug Dependency Services.

Nova Scotia Gaming Control Commission (1996). A Year in Review: Gaming in Nova Scotia, The First Annual Report. Nova Scotia Gaming Control Commission 1995-1996. Halifax, Nova Scotia: Gaming Control Commission.

Ocean, Grant and Garry J. Smith (1993). "Social Reward, Conflict, and Commitment: A Theoretical Model of Gambling Behavior." Journal of Gambling Studies 9(4, Winter): 321-339.

Ohtsuka, Keis; Eric Bruton, Louisa DeLuca and Victoria Borg (1997). "Sex Differences in Pathological Gambling Using Gaming Machines." Psychological Reports 80: 1051-1057.

Omnifacts Research Ltd. (1996). "A Study of Gambling in Nova Scotia: General Population Survey." A Year in Review: Gaming in Nova Scotia, Nova Scotia Gaming Control Commission 1995-96, Halifax, Nova Scotia: Gaming Control Commission.

Osborne, Judith A. and Colin Campbell (1989). "Recent Amendments to Canadian Lottery and Gaming Laws." Colin Campbell and John Lowman (eds.), Gambling in Canada: Golden Goose or Trojan Horse. Burnaby, B.C. : School of Criminology, Simon Fraser University: 127-147.



Rosecrance, John (1986). "The Sociology of Casino Gamblers." Nevada Public Affairs Review 2: 27-31.

Rosecrance, John (1988). Gambling Without Guilt: The Legitimation of an American Pastime. Pacific Grove, California: Brooks/Cole.

Saskatchewan Health (1994). Focus Sheet: A Profile of VLT Gamblers. Regina, Saskatchewan: Saskatchewan Health.

Seelig, Michael Y. and Julie H. Seelig (1998). "'Place Your Bets!' On Gambling, Government and Society." Canadian Public Policy XXIV(1): 91-106.

Shaffer, Howard J., Matthew N. Hall and Joni Vander Bilt (1997). Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis. Boston, Massachusetts: Harvard Medical School, Division on Addictions.

Smith, Garry (1987). "Gambling and Sport: The Canadian Experience." Arena Review 11(1, May): 25-36.

Smith, Garry J. (1990). "Pools, Parlays, and Point Spreads: A Sociological Consideration of the Legalization of Sports Gambling." Sociology of Sport Journal 7(3, September): 271-286.

Smith, Garry and Jason Azmier (1997). Gambling and the Public Interest? Calgary, Alberta: Canada West Foundation.

Smith, Garry and T.D. Hinch (1996). "Canadian Casinos as Tourist Attractions: Chasing the Pot of Gold." Journal of Travel Research 34(3, Winter): 37-45.

Sternlieb, George and James W. Hughes (1983). The Atlantic City Gamble. Cambridge, Massachusetts: Harvard University Press.

Stokowski, Patricia A. (1996). "Crime Patterns and Gaming Development in Rural Colorado." Journal of Travel Research 34(3, Winter): 63-69.

Thompson, William N. and Diana Dever (1994) The Sovereign Games of North America: An Exploratory Study of First Nations' gambling enterprises. Gambling in Canada: The Bottom Line. Colin Campbell (ed.) Burnaby, B.C.: School of Criminology, Simon Fraser University

Thompson, William N. (1997). Legalized Gambling: A Reference Handbook. Santa Barbara, California: ABC-CLIO.

Thompson, William N. and Ricardo Gazel (1997). "The last Resort Revisited: The Spread of Casino Gambling as a Prisoner's Dilemma." William Eadington and Judy Cornelius (eds.), Gambling: Public Policies and the Social Sciences. Reno, Nevada: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada.

Thompson, William N., Ricardo Gazel and Dan Rickman (1997). The Social Costs of Gambling in Wisconsin. Wisconsin: The Wisconsin Policy Research Institute.

Thorson, James A.; F.C. Powell and Michael Hilt (1994). "Epidemiology of Gambling and Depression in an Adult Sample." Psychological Reports 74: 987-994.

Walker, Michael B. (1996a). "The Medicalization of Gambling as an Addiction." J. McMillen (ed.), Gambling Cultures: Studies in History and Interpretation. New York, NY: Routledge.

Walker, Michael B. (1996b). "The Prevalence of Problem and Pathological Gambling: A Critical Analysis." Journal of Gambling Studies 12(2, Summer): 233-249.

Wisconsin Policy Research Institute (1996). Casinos and Crime in Wisconsin: What's the Connection? Wisconsin, Wisconsin Policy Research Institute. 9: 1-20.

Wynne, Harold J., G. Smith and R. Volberg (1994). Gambling and Problem Gambling in Alberta. Alberta: Alberta Lotteries and Gaming Commission.

Yorke, Wayne M. (1995). "Adolescence Gambling & Addiction: A Canadian View." The Nova Scotia Psychologist 10(5, Fall): 2-7.



# Appendix D

**CONVENIENCE GAMBLING IN NOVA SCOTIA: A STUDY OF  
CONSUMER INCOME AND EXPENDITURE PATTERNS**

**PREPARED FOR  
ALCOHOL AND GAMING AUTHORITY  
Nova Scotia**

**BY  
MPM GAMING RESEARCH**

**OCTOBER 1999**

## TABLE OF CONTENTS

<b>LIST OF TABLES</b>	<b>/3</b>
<b>EXECUTIVE SUMMARY</b>	<b>/7</b>
<b>1. INTRODUCTION</b>	<b>/12</b>
<b>2. DATA AND METHODOLOGY</b>	<b>/22</b>
2.1 Data	/22
2.2 Methodology	/25
<b>3. PROFILES OF GAMBLING HOUSEHOLDS</b>	<b>/29</b>
3.1 Who Gambles?	/29
(i) Income	/31
(ii) Age	/32
(iii) Education	/33
(iv) Household Composition	/34
(v) Sources of Income	/36
(vi) Geographic Differences	/38
(vii) Profile of Gambling Households	/39
3.2 The Intensity of Gambling	/40
(1) Overview of Distribution of Gambling Expenditures	/41
(2) Determinants of Differences in Gambling Intensity	
Across Households	/43
(i) Household income	/44
(ii) Age	/47
(iii) Education	/49
(iv) Household Composition	/51
(v) Sources of Income	/54
(vi) Geographic Differences	/57
3.3 Conclusion	/57
<b>4. GAMBLING AND FINANCIAL WELL-BEING</b>	<b>/65</b>
4.1 Spending on Necessities	/66

4.2 Changes in Net Worth	/68
4.3 Saving for Retirement	/69
4.4 Saving	/71
4.5 Summary	/72
5. GAMBLING AND OTHER DISCRETIONARY AND LEISURE SPENDING	/73
6. ADDENDUM - DIFFERENCES BY TYPE OF GAME	/80
6.1 Introduction	/80
6.2 Likelihood of Gambling and Amounts Spent by Type of Game	/82
(i) Income	/84
(ii) Age	/85
(iii) Education	/86
(iv) Geographic Area	/88
(v) Household Composition	/90
(vi) Summary	/91
6.3 Changes in 1997	/92
(i) Trends by Type of Game in Nova Scotia	/94
(ii) Trends by Type of Game in Saskatchewan	/96
(iii) Trends by Type of Game in Canada	/97
(iv) Summary	/99
7. BIBLIOGRAPHY	/100
8. TABLES	/104

## **LIST OF TABLES AND CHARTS**

### **Section 3.1 Who Gambles?**

**Table 1** Percentage of Households Reporting Expenditures on Games of Chance, NS, Saskatchewan and Canada

**Table 2** Household Expenditures on Games of Chance - Canada and the Provinces

**Table 3-1,2,3** Profiles of Households by Extent of Expenditures on Games of Chance - Nova Scotia, Saskatchewan, Canada

**Table 4** Probit Regressions - Probability of Reporting Gambling Expenditures

### **Section 3.2 Intensity of Gambling, if gamble**

**Table 5** Profiles of Households by Gambling Expenditure Quintiles

**Table 6** Table 6-1,2,3 Profiles of Households in Low, Medium and High Gambling Groups

**Table 7** Average Expenditures per Household on Games of Chance

**Table 8** OLS Regressions- Level of Gambling Expenditures

**Table 9** Average Gambling Expenditures as a Percentage of Total Household Income

**Table 10** OLS Regressions - Gambling Expenditures as a Proportion of Total Household Income

**Table 11** Percentage of Households Who are in the Top Gambling Expenditure Quintile

**Table 12** Probit Regressions - Probability of Being in the Top Gambling Expenditure Quintile

**Table 13** Percentage of Households Who are in the High Gambling Group (Top 25%, Gambling Expenditures as a Proportion of Income)



**Table 14** Probit Regressions - Probability of Being in the High Gambling Group (Top 25%, Gambling Expenditures as a Proportion of Income)

#### **Section 4 Gambling and Financial Well-Being**

**Table 15** Expenditures on Necessities and Indicators of Financial Well-Being, NS, Saskatchewan and Canada

**Table 16** OLS Regressions - Household Expenditures on Food for Home

**Table 17** OLS Regressions - Household Expenditures on Principal Accommodation

**Table 18** OLS Regressions - Net Change in Assets minus Liabilities

**Table 19** OLS Regressions - Change in RRSP Balances

**Table 20** OLS Regressions- Total Household Income minus Expenditures

#### **Section 5 Gambling and Other Discretionary and Leisure Spending**

**Table 21** Expenditures on Leisure/Entertainment Activities, and Charities, NS, Saskatchewan and Canada

**Table 22** OLS Regressions-Household Expenditures on Home Entertainment

**Table 23** OLS Regressions- Household Expenditures on Total Recreation

**Table 24** OLS Regressions- Household Expenditures on Recreational Services

**Table 25** OLS Regressions- Household Expenditures on Alcohol from Licensed Establishments

**Table 26** OLS Regressions- Household Expenditures on Food From Restaurants

**Table 27 OLS Regressions- Household Expenditures on Charitable Donations**

**Charts**

**Section 3 Profiles of Gambling Households**

**Chart 1** Percentage of Households Reporting Expenditures on Games of Chance by Income Group in Nova Scotia, Saskatchewan and Canada

**Chart 2** Average Gambling Expenditures as a Proportion of Total Household Income by Income Group in Nova Scotia, Saskatchewan and Canada

**Chart 3** Average Expenditures per Household on Games of Chance by Income Group in Nova Scotia, Saskatchewan and Canada

**Section 6 Addendum - Differences by Type of Game (Statistics Canada Special Runs)**

**Table 28** Average Household Expenditures on Gaming Activities by Selected Household Characteristics, Nova Scotia, 1996

**Table 29** Average Household Expenditures on Gaming Activities by Selected Household Characteristics, Saskatchewan, 1996

**Table 30** Average Household Expenditures on Gaming Activities by Selected Household Characteristics, Canada, 1996

**Table 31** Average Household Expenditures on Gaming Activities by Selected Household Characteristics, Nova Scotia, 1997

**Table 32** Average Household Expenditures on Gaming Activities by Selected Household Characteristics, Saskatchewan, 1997

**Table 33** Average Household Expenditures on Gaming Activities by Selected Household Characteristics, Canada, 1997

**Table 34** Average Household Expenditures on Gaming Activities by Selected Household Characteristics, Atlantic Region, 1996

**Table 35** Average Household Expenditures on Gaming Activities by  
Selected Household Characteristics, Prairies Region, 1996

**Table 36** Average Household Expenditures on Gaming Activities by  
Selected Household Characteristics, Atlantic Region, 1997

**Table 37** Average Household Expenditures on Gaming Activities by  
Selected Household Characteristics, Prairies Region, 1997

## EXECUTIVE SUMMARY

- This research develops sub-project 3 from our final report of January 1999 which developed a comprehensive model for the study of gaming and social impacts. The current study examines consumer income and expenditure patterns as they relate to gambling in the province of Nova Scotia, with comparisons to Saskatchewan and Canada.
- This study uses data from the Statistics Canada 1996 Family Expenditure Survey (FAMEX) and from the 1997 Survey of Household Spending (SHS). These surveys provide information about expenditures on gambling and the costs of gambling in terms of income displacement from basic necessities or other discretionary spending.
- Our comparative analysis of the 1996 FAMEX microdata tape is based on a sample of 821 households in Nova Scotia, 898 households in Saskatchewan and 10,406 households in Canada. Statistics Canada also provided data from special runs on unpublished 1996 FAMEX and 1997 SHS data.
- Both descriptive and multivariate techniques were used in analyzing profiles of gambling households, gambling and financial well-being and gambling and other discretionary and leisure spending.
- With regard to the likelihood of gambling, our key findings are:
  - (a) Household income is positively associated with gambling in all three jurisdictions, but income is not a predictor of the amount spent on gambling in Nova Scotia;
  - (b) Higher gambling rates are found in the middle age groups. "Young" and "senior" gamblers are more evident in Saskatchewan than in Nova Scotia;
  - (c) Level of education is not correlated with gambling in Nova Scotia except in the case of university educated households, where the rate is lower;

- (d) Higher gambling rates are found among married couple households with either children or relatives. One person households have the lowest rate of participation in gambling;
  - (e) Households whose main source of income is wages and salaries are more likely to report gambling expenditures in all three jurisdictions;
  - (f) Households with employment insurance income, however, have a higher probability of gambling, while households with social assistance income have a lower probability of gambling in Nova Scotia; and
  - (g) Unlike Saskatchewan and Canada where gambling rates are higher in larger urban areas, in Nova Scotia gambling rates are not significantly different between rural, small town and urban areas.
- With regard to the intensity of gambling our key findings are:
    - (a) As a percentage of income, lower income groups spend more on gambling products than do other income groups and this regressive relationship is more evident in Nova Scotia than elsewhere;
    - (b) Households in the 55-64 age range spend the highest amount on gambling in each jurisdiction;
    - (c) While seniors are less likely to gamble than middle age groups, those who do gamble spend a higher proportion of their income on gambling products in all three jurisdictions;
    - (d) In Nova Scotia, the top quintile of gamblers is rather diverse in terms of age. However, both the youngest and oldest age groups have a strong likelihood of being in the high intensity gambling group as measured by the proportion of household income spent on gambling;
    - (e) Gambling expenditures are generally inversely related to education on all measures of intensity in all jurisdictions,

**with distinctly lower dollar amounts and proportion of income spent by households with post secondary education. In Nova Scotia, 4 out of every 10 households in the top gambling quintile and 6 out of every 10 households in the high intensity gambling group are households where the education of the reference person is less than nine years; and**

**(f) Households who depend on government transfer payments do not gamble more intensely than other households in the province, either in terms of dollars or proportion of income spent. Household with social assistance recipients are actually less likely to be in the top gambling quintile.**

**(g) One person households have the lowest mean gambling expenditure, while households comprised of married couples spend the most on gambling;**

- Gambling expenditures generally do not negatively affect spending on the basic necessities of food and shelter in Nova Scotia. Neither the level nor intensity of gambling (as a proportion of income) explains variation among households in the amount they spend on these basic items, after controlling for other factors.**
- Gambling, however, does negatively affect households' ability to save and plan for their financial futures. Our regression results indicate that households in the high gambling group (based on the proportion of income spent on gambling) may be putting their financial futures at risk.**
- Spending on other discretionary and leisure items is either unaffected by gambling or it is higher for gamblers and increases with the intensity of gambling. In Nova Scotia, gambling expenditures are supplements not substitutes for spending on recreation, alcohol, food from restaurants and home entertainment.**
- Spending on charitable donations is negatively related to gambling in all jurisdictions. Charitable**

donations are lower for households with gambling expenditures compared to those without gambling expenditures. In the regression analysis, the Canadian case was especially acute with regard to intensity of gambling.

- With regard to differences by type of game (1996 special runs), our key findings are:
  - (a) In Nova Scotia, as in Saskatchewan and Canada, the highest proportion of households report expenditures on government lotteries, followed by casinos and slots, then bingos. However, in Nova Scotia average spending on bingos ranks second to government lotteries;
  - (b) Both Nova Scotia and Saskatchewan have higher average spending on casinos and slot machines than the Canadian average;
  - (c) In Nova Scotia participation and spending on casinos and slot machines increases with income and education and is higher in urban areas;
  - (d) In Nova Scotia spending on bingos is higher in lower educated and older households than in other education and age groups, but it does not differ by income level or size of community;
  - (e) Participation and spending on lotteries in Nova Scotia is higher for middle age households, those with less than post-secondary education, and those living in smaller communities.
- With regard to changes in gambling expenditures from 1996 to 1997 (special runs), our key findings are:
  - (a) Nova Scotia, like Canada and Saskatchewan, shows a decline in the percentage of households reporting expenditures on games of chance;
  - (b) However, Nova Scotia has an increase in average gambling expenditures per household, while Canada has a decline.

**Thus a smaller proportion of households are gambling more intensely;**

- (c) The decline in percentage of households reporting gambling expenditures in Nova Scotia is totally due to the decline in government lotteries. The percentage of households with expenditures on bingos actually increased, while those reporting casino and slot machine expenditures held steady;**
- (d) Average levels of spending in Nova Scotia increased for casinos and slot machines, especially in smaller areas, though the increase is not as dramatic as in Saskatchewan;**
- (e) Average levels of spending on bingos in Nova Scotia also increased, unlike the other jurisdictions, and the increase is concentrated in smaller areas;**
- (f) The growth in gambling expenditures in Nova Scotia comes mainly from increased spending by households in the higher income groups, which may be a welcome trend, given the evidence of the regressiveness of gambling as a tax.**



## 1. INTRODUCTION

This research flows out of our earlier study which developed a comprehensive conceptual model of the positive and negative social effects of gambling in Nova Scotia (MPM, 1999). In the final report, we outlined a series of research projects which would document and analyze the social and economic consequences of gambling in the province. This study develops sub-project 3 in our final report of January, 1999.

According to the convenience model, the expansion of gambling is fueled by the general increase in discretionary consumer spending. Its growth partly reflects consumer spending choices in an increasingly service oriented economy. Positive social effects arise from the enjoyment of the gambling product. The great majority of gamblers experience these positive "consumption" benefits with little or no negative effects. However, social costs emerge when gambling siphons off money or time which are normally used for non-discretionary purposes (i.e., money for necessities, or time usually spent on paid work, child care or school work). Social costs may also be associated with changes in the use of discretionary time or money when, for example, people play video lottery games instead of participating in or supporting sports events or when people frequent casinos rather than their local performing arts centres. A detailed study of consumer income and expenditure patterns is thus vital to understanding the benefits and costs

of gambling for consumers, both those who gamble responsibly, and those who put their families and their financial futures at risk.

Furthermore, we claim in our conceptual model that gambling can continue to grow as long as overall consumer spending rises or as long as it is able to increase its proportion of available consumer dollars. This study explores gambling expenditures in relation to the competing demands on consumers and the "opportunity costs" of gambling expenditures overall. It contributes to an understanding of gambling as either a substitution effect or a complimentary effect.

The objectives of the study are: (a) to clarify the relationship between gambling expenditures and other forms of consumer spending, sources and levels of income, and debt; (b) to evaluate distributional issues related to gambling expenditures as they affect the costs and benefits of gambling; (c) to better understand the consumption benefits derived from gambling; and (d) to compare and contrast Nova Scotia with other jurisdictions (i.e., Saskatchewan and Canada) on these aspects of gambling.

We chose Saskatchewan as a comparative case study because it has similar demographics (i.e., age, income, education, and rural-urban population distributions), similar convenience gambling products (i.e., bingo, video lottery terminals, lotteries and casinos), comparative gross gambling revenues, per capita adult wagering rates, and rates of problem

gamblers, and similar percentages of provincial government revenues derived from gambling (Smith and Azmier, 1997; Azmier and Smith, 1998).

According to our understanding of convenience gambling, it is organized differently in Nova Scotia than in places such as Las Vegas and Atlantic City (MPM, 1999). In the case of the latter, gambling operators attract a high proportion of their customers from outside the areas in which they do business. They, in effect, export gambling services to residents of other regions and countries. These destination-driven gambling sites create jobs in both resort complexes and in related areas such as restaurants, amusements, recreation, retail shopping, construction and supplies. Much like a factory, they bring in new money that is spent locally on payrolls and the purchase of inputs. Owners' profits, in turn, are reinvested back into the local community. This pattern of economic development occurs either because gambling is prohibited in adjacent regions or because the destination locales have a large enough tourist infrastructure to attract a broad base of customers beyond what the gambling facilities themselves command. In effect, gambling in Las Vegas, Reno and Atlantic City is segregated from the population centres it depends on, and this geographic pattern affords these cities a relative protection from long lasting negative social impacts (Eadington, 1995b; Goodman, 1995a; 1995b; Grinols and

Omorov, 1996:3). As Eadington (1995a:52) observes of Las Vegas "it is difficult to attribute social problems in the community to any or all of the possible causal factors (of gambling)".

Gambling in Nova Scotia, however, emphasizes locals rather than tourists as customers. It is organized as a regular urban and rural leisure activity in its own right. Almost every community in the province has corner stores selling lottery commodities. Many churches and service organizations provide bingos, raffles, and charitable casino style gambling. Video lottery terminals are available in local taverns, lounges, bars, restaurants, and other licensed community sites. For example, there are now 3,625 video lottery terminals located at about 585 sites in the province (Porter Dillon Ltd., 1999:2). Casino gambling is similarly based on expedience. It draws its customers from the local region and not from across the country or around the world. Casinos in Nova Scotia are closer to their customer markets and, therefore, are more accessible than casinos at destination sites. Ultimately, their *raison d'être* is to encourage people to gamble, not to have a holiday experience (Eadington, 1995a:53-54; LaFramboise, 1998).

The market structure of convenience gambling, we note, is also different from the traditional, open and competitive model that characterized the development of commercial gambling in the United States in the 1950s, 1960s and 1970s. Governments in Canada now

directly own and manage most gambling products. They authorize monopolies (i.e., lottery gambling), multiple licensing arrangements with operators (i.e., video lottery gambling and bingo) and exclusive franchise arrangements with private companies to run gambling as joint ventures (i.e., casinos). Governments have also established numerous regulations and controls over the marketplace. These include financial guarantees to the public, constraints which protect gamblers from their own misfortunes (i.e., wager size limits, advertising restraints), restrictions which limit access or which restrain the organization of the gambling activity proper (i.e., age restrictions, site designations, quotas, mandated gambling hours, prohibitions against alcohol, food and live entertainment on sites), rules which ensure the integrity of the games (i.e., controlling illegalities at play), regulations which guarantee the process of revenue collection and sharing, and procedures which watch against the involvement of unwanted people in the ownership, management and play of the games (Eadington, 1995b:174; Campbell and Smith, 1998; Smith and Azmier, 1997).

The economic and social impacts of convenience gambling in Nova Scotia, we argue, are therefore likely to be different from resort based community gambling or even urban based gambling in Canadian settings such as Windsor or Niagara Falls, which attract most of their customers from outside the country (Smith and Hinch, 1996:41-43;

Seelig and Seelig, 1998:98). In Nova Scotia, the economic benefits of convenience gambling are not as obvious; nor are the social impacts as distant or dispersed. Indeed, gambling that caters primarily to local residents may not have a sizable, stimulating economic effect. Instead, it may reshuffle available expenditures away from other goods and services. Jobs created and revenues generated by convenience gambling, may often be offset by jobs lost and declining revenues elsewhere in the region (Goodman, 1995a; 1995b; Grinols and Omorov, 1996; Grinols, 1995). Similarly, social impacts which are hidden or exported in tourist destination gambling economies, often remain visible and long lasting in gambling economies shaped by the spread of the local convenience marketplace. Who loses and who benefits matters much more in the case of the latter, because the economic, familial, community, educational and political impacts remain embedded in the local jurisdiction. These social impacts may rejuvenate or enrich a region, or they may add to social, moral and political costs (Eadington, 1994:6; Goodman, 1995a; 1995b; Thompson, 1997; Thompson and Gazel, 1997:183-205).

Furthermore, the convenience market place consists of diverse gambling forms. In our model, each type of gaming activity has particular market characteristics, regulatory regimes and characteristics of play. Market structure includes geographical dispersion, competition/concentration and private/public ownership. Regulation, as

noted, includes licensing, agreements regarding revenue sharing and distribution, restrictions and procedures for guaranteeing the integrity of the games, and policies identifying and treating problem gamblers such as health warnings, help lines and counselling services. The characteristics of play include skill, speed and continuity of the games, size of wagers and pay-outs, and predictability of wins and losses. These dimensions, as they apply to each type of game, (i.e., bingo, lotteries, video lottery play, and slots and casinos, etc...), in turn, shape player characteristics including demographic and psychographic profiles. And this leads to differences in the distribution of occasional/recreational, serious social and problem gamblers by type of game.

We argued in our earlier report that the spread of convenience gambling in the last decade, especially in the form of new lottery products, video lottery games and casino gambling, is fueled by the general increase in discretionary consumer spending. Indeed, in 1996, the consumption of goods and services totaled \$338.2 billion, a real increase of 16 percent from 1986. According to Family Expenditure (FAMEX) survey data, household consumption of goods increased by 6 percent but the consumption of services soared by 34 percent (Little and Beland, 1998:18). In particular, household expenditures for services were galvanized by the demand for financial and real estate products

such as rent payments, mortgage interest, interest on personal loans, and financial services, the demand for communication services such as new telephone services, cable-vision services, cellular telephones and the Internet, and the demand for amusement and recreation services such as live stage performances, live sports, movies at theaters, recreation fees and games of chance. Total household spending on finance and real estate services in 1996 was 34 percent higher than in 1986. Total household consumption of communication services was 72 percent higher in 1996 than in 1986. Total household spending on amusement and recreational services was 47 percent higher than in 1986 (Little and Beland, 1998:21,25,27).

The 47 percent increase in household spending on amusement and recreational services was dramatic, given that Canada's population rose by only 14 percent during that period. This increase in consumer spending helped the amusement and recreational services sector to grow twice as quickly as the overall economy. Of the \$8.5 billion spent on amusement and recreational services in 1996, the largest amount was spent on games of chance (\$3.8 billion). Indeed by 1996, spending on games of chance reached \$334 per household which amounted to 44 percent of the average household expenditure of \$780 on amusement and recreational services (Little and Beland, 1998:27-28).



A conservative estimate of per capita gambling expenditures (18 years of age or over) between 1992 and 1997, reveals that Nova Scotians increased their spending from \$200 to \$296, an increase of approximately 33 percent. Furthermore, gambling profits in the province increased by 48 percent up from \$69 million in 1992 to \$102 million in 1997. This represents a rise in gambling profits as a proportion of government revenues, up from 2.6 percent in 1992 to 3.4 percent in 1997 (Marshall, 1998:11). A more liberal estimate of gambling revenues and expenditures suggests that provincial wagering by Nova Scotians increased by 24 percent, up from \$760,204,537 in 1995-96 to \$940,284,575 in 1997-98 (Alcohol and Gaming Authority, 1995-96; 1996-97; 1997-98). With a Nova Scotia adult population of 728,373 and gross gambling revenues of approximately \$940 million in 1997-98, Nova Scotia's per adult wagering rate is estimated at \$1290. If prizes paid (\$626,228,644) are subtracted from the provincial gaming wager (\$940,284,575), then Nova Scotia's per adult net gambling spending is estimated at \$431 (Alcohol and Gaming Authority, 1997-98).

This report offers new evidence concerning the distribution of these gambling dollars across households and the impact of this spending. Key questions explored include: (a) how are gambling expenditures related to the level and source of household income, as well as other demographic characteristics?;(b) how are gambling expenditures

distributed across the gambling population?; (c) how do expenditure patterns differ by type of gambling activity [government lotteries, other lotteries and raffles, casinos and slot machines and bingos]?; (d) to what extent is household spending on necessities affected by gambling?; (e) to what extent are changes in household debt levels, and net worth, affected by gambling?; (f) is gambling a substitute or a complement to other recreational/entertainment products and services?; (g) how do expenditure patterns differ by intensity of gambling, as measured by the proportion of household income, or total amount, spent on gambling?; (h) does Nova Scotia differ from Saskatchewan or Canada in any of these expenditure patterns?

The report is organized as follows. In Section 2 we discuss the data sources and methodology. In Section 3 we analyze gambling expenditure patterns in all three jurisdictions, examining determinants of whether or not households gamble, and how intensively they gamble. Section 4 focuses on the impact of gambling expenditures on the financial well-being of households. In Section 5 we study the relationship between expenditures on gambling and other discretionary and recreational/entertainment spending. We report on the special Statistics Canada runs by different games of chance in the Addendum.

## **2. DATA AND METHODOLOGY**

### **2.1 Data**

This project uses data from Statistics Canada's 1996 Family Expenditure Survey (FAMEX) and from the 1997 Survey of Household Spending (SHS). A question on expenditures on government-run lotteries has been included in the FAMEX survey since 1974. The 1996 FAMEX survey introduced questions about winnings from games of chance and expenditures on three additional games of chance: casinos and slot machines; bingos; and non-government lottery and raffle tickets. Thus, in 1996 there is a new summary measure on games of chance expenses. These surveys provide us with quantitative information about both the positive effects of gambling as entertainment/recreation and the costs in terms of income displacement from other discretionary spending or from basic necessities. In 1997 the FAMEX survey was replaced by the Survey of Household Spending, which is to be conducted every year. The same questions on games of chance are included in the SHS survey.

Katherine Marshall (1996a; 1996b; 1998) has already used FAMEX data to explore how Canadian households reported expenditures on selected games of chance. This project undertakes more detailed analysis of expenditure patterns in Nova Scotia and makes comparisons with Saskatchewan and Canada-wide data. Most of the

analysis in this project uses the 1996 FAMEX public-use microdata tape, as the 1997 SHS tape has not yet been released. Only total games of chance expenses are available on the 1996 microdata tape.

Special runs on the 1996 FAMEX and 1997 SHS by Statistics Canada enable us to obtain some information by different games of chance. However, this analysis includes fewer variable categories because of sample size restrictions. Furthermore, multivariate analysis was not possible. Given these differences, the tables and analysis of the special runs are included as an Addendum, in Section 6.

The FAMEX survey is a stratified multi-stage sample selected from the Labour Force Survey sampling frame (Statistics Canada, 1991). The sample represents persons living in private households in the 10 provinces as well as Whitehorse and Yellowknife with the following exceptions: residents of Indian Reserves; patients and inmates living full-time in collective households such as hospitals, penal institutions and old age homes; and official representatives of foreign countries and their families.

The data is collected by interviewers using a detailed questionnaire for each household. The unit of analysis in both surveys is the household. Basic demographic information is collected in a face-to-face interviews with a reference person and a spouse, if applicable. The data includes: total household income (before and after taxes) and

income from each of wages/salaries, self employment, investment, government transfers and other sources; marital status, age, sex, education, occupation, weeks worked full time, weeks worked part time, and country of birth of reference person and spouse. Other variables provide a description of the household, such as number of children, youths and adults, household type (one person, married couple, lone parent, etc...), and indicators related to EI, social assistance and the low-income cut-off (LICO). In this data, household is defined as a person or a group of persons occupying one dwelling unit, and thus in some cases households include unrelated individuals.

Information is collected on household expenditures on a comprehensive list of goods and services, including financial items (RRSPs) and charitable contributions. Because the collection of expenditures by recall and reference to records over a twelve month period imposes a heavy burden on both the interviewer and respondent, it necessitates lengthy interviews and multiple respondent visits. Large expenditures such as automobiles, furniture, and electronic equipment, and food and transportation expenditures, which are known percentages of a typical budget, can be estimated fairly readily and accurately. But expenses on smaller consumer items or on entertainment/recreational products are less easily recalled by respondents, because they are neither

predictable costs nor recorded as financial transactions (canceled checks, receipts, contracts).

Similarly, information about gambling is not easily recalled. In addition to the problems of memory, gamblers are often reluctant to divulge reliable information about their gambling in front of family members or, indeed, strangers. As Marshall (1996b:30) notes of government lotteries "for whatever reason, households [in the FAMEX survey] consistently underreport the amount of money they spend on government lottery tickets per year." We suspect that this problem of underreporting applies to other forms of gambling such as casinos and bingos, and we caution that the statistics used in this report indicate only the "tip of the iceberg."

For our purposes, relevant expenditure items, other than games of chance, are those which reflect "necessities", such as expenditures on food and shelter, and those which are part of recreational or entertainment spending, such as money spent for restaurant meals, movie shows, live performances (stage, music, sports), home entertainment and alcohol.

## **2.2 Methodology**

In our analysis of the 1996 FAMEX microdata tape we work with a sample of 821 households in Nova Scotia, 898 in Saskatchewan and 10,406 in Canada. The basic gambling data we use is "expenses on

games of chance", which we refer to as expenditures on games of chance, or gambling. We categorize households as engaging in gambling if this variable is greater than zero. Non-gambling households have zero "expenses on games of chance".

We use several measures of gambling in our analysis. We examine games of chance expenses (\$), for those households for whom this is positive. It should be noted that the average expenditures on games of chance reported in our study (see Table 2, for example) differ from those published by Statistics Canada (Marshall, 1998). In the public use file, expenditures on games of chance are essentially net of winnings (unless winnings exceed wagers, in which case net winnings are added to other money receipts, so that positive expenditures are recorded for all who gamble). Marshall's (1998) expense figures, on the other hand, are based on 'before winnings', since she had access to the unpublished data which includes both wagers and winnings. We had no option in this regard.

We also construct a variable for games of chance expenditures as a proportion of total household before tax income. In addition, we study the quintile expenditure distribution for games of chance. To examine the most intensive gambling households, we use the top spending quintile as one measure, and the top quartile of gambling

expenses as a proportion of household income as the other measure (see Section 3.2).

We use a mixture of descriptive and multivariate techniques to relate household gambling (as measured above) to other variables. We use the sample weights in our analysis, so it will represent the population. It is important to note that, because the household is the unit of analysis, we use the characteristics of the reference person, or respondent for basic demographic items such as age and education. Furthermore, we always use total household income before taxes. Detailed descriptions of variables are given in each section and in the table notes.

Descriptive techniques include calculating frequencies, means, quintile distributions and cross-tabs to show differences in gambling expenditures in relation to one other factor (such as household income). We first report descriptive findings for each question addressed in Sections 3, 4 and 5. For findings based on cross-tabs, we indicate whether differences (i.e., the proportion of households in different income groups who gamble) are statistically significant. In the case of mean values, we usually report the standard errors.

We also estimate regressions for each aspect of gambling (such as likelihood of gambling, amount spent, proportion of income spent), and for each regression we include the variables which we examined



separately in our descriptive tables. This enables us to control for the impact of other variables, when focusing on one relationship of interest (such as how expenditures on games of chance are affected by household income).

In instances where the variable to be explained (the dependent variable) can take only two values (such as does a household have gambling expenditures or not), then the appropriate procedure is to estimate a probit regression (see Table 4). When the dependent variable is continuous, on the other hand (such as the amount spent on games of chance by households who gamble), then ordinary least squares (OLS) regressions are estimated (see Table 8). In our interpretation of the regression results, we focus on variables whose coefficients are statistically significant, and comment on the signs (for example, is a variable negatively or positively related to the level of gambling expenditures of a household).

Given the smaller sample sizes in Nova Scotia and Saskatchewan, the regression results often include fewer significant coefficients than when the Canadian sample is used. This makes it difficult to compare a province with the national findings. We expect that, with a larger sample, some variables which are not significant at the provincial level might become significant. These cautions should be borne in mind in interpreting our results.

### **3. PROFILES OF GAMBLING HOUSEHOLDS**

#### **3.1 Who gambles?**

The vast majority of households (83%) in Nova Scotia, as in Saskatchewan (82%) and the rest of Canada (81%) spend money on games of chance. As discussed above, gambling has become a normalized activity which has grown along with the general rise in disposable income and entertainment/leisure spending. Not all households, however, have the same propensity to gamble. Our convenience model draws attention to economic, cultural and institutional factors which affect the likelihood of participation in games of chance. For instance, gambling is associated with money to spend and pressure to escape daily stress, therefore we expect rates of gambling to be positively related to income, and to be higher in multiple-earner families, middle age groups and perhaps even in husband-wife households.

Culturally, however, gambling as a choice of leisure activity appeals more to some than others. For example, it is associated in the literature with lower educational levels (Nova Scotia Department of Health, 1998; Clotfelter and Cook, 1989; Omnifacts Research, 1996). There are also other cultural norms, such as the popularity and

endurance of bingo in the Atlantic region, particularly in rural areas. Furthermore, there are also differences in availability of gambling across provinces and within provinces.

It takes time as well as money to gamble. Thus, there is speculation about the growth of gambling among seniors, who may have the time and money to gamble (Grant, 1998). Indeed, other recipients of government transfer payment (such as social assistance, EI) may also have more time, though less money, with which to gamble. The presence of children in the household may also affect the likelihood of gambling, through the negative affect on disposable income, the increase in daily stress, or the reduction in time available to play (Nova Scotia Department of Health, 1998). The time constraint may work in the opposite direction from the "stress" factor mentioned above (demands on people which cause stress often reduce the time available to gamble).

We use both descriptive and multivariate techniques to examine differences among households in determining whether they report gambling expenditures. We use variables which reflect the above factors, including household income, age of reference person, education of reference person, household composition, sources of income, and geographic location. Table 1 gives the percentage of households with particular characteristics (such as household income <\$20,000) who

report expenditures on gambling, in each of the three jurisdictions. Unless otherwise noted, all differences in frequencies within each set of variables (such as income groups) are statistically significant with at least a 95 percent level of confidence. Table 2 highlights differences in gambling activity of households in Canada, by province and by the type of games of chance which are legally available. Table 3 shows how gambling households differ from non-gambling households in terms of income, age, education and geographic distribution. Table 4 reports the results of probit regressions of the probability of households reporting gambling expenditures. In these regressions the impact of each variable is isolated, controlling for other variables. In our discussion, we highlight the explanatory variables which are statistically significant (with at least a 90% confidence level) in the regressions and comment on the signs of the estimated coefficients - i.e. does having the particular characteristic increase or decrease the probability of a household reporting gambling expenditures, after controlling for the other variables.

#### **i) Income**

As shown in Table 1 and Chart 1, higher levels of income are associated with higher frequency of gambling, as expected. In Nova Scotia, for example, 70% of households with before-tax incomes under

\$20,000 gamble, compared to 92% of those with before tax income of at least \$80,000 or more. The gambling rates for these income groups are virtually identical in Saskatchewan, but are lower in Canada (66% and 87% respectively). There are some differences in the pattern across income groups. The Saskatchewan rates rise steadily until the \$60-80,000 range, while the Nova Scotia rates are more level through the \$40,000-80,000 ranges. In the probit regression analysis, 'total household before tax income' is positively associated with the rate of gambling, controlling for other variables in each of the samples (Table 4). Thus, as income increases, households are more likely to participate in games of chance.

## **ii) Age**

We also find significant differences by age of respondent, with rates of gambling first rising and then declining (Table 1). Younger households (respondent age 15-24) and older households (respondent age 65 and over) have the lowest incidence of gambling in each jurisdiction (69% and 71% respectively in Nova Scotia). Note that the percentage of households in the youngest age group who report gambling expenditures is considerably higher in Saskatchewan (80%) than in Nova Scotia or Canada. In Nova Scotia the percentage of households who gamble is stable (87%) between age 25-54, while in

Saskatchewan this percentage is found for a slightly higher age range (age 35-64). As expected, higher gambling rates are found in the middle age groups. "Young" and "senior" gamblers are more evident in Saskatchewan than Nova Scotia. The gambling pattern by age in Nova Scotia is quite similar to that in Canada as a whole. In the probit analysis, (Table 4) the higher gambling rates associated with middle age groups and the lower rates for seniors and youth are clearly confirmed in the Canadian case, with less clear results for Nova Scotia and Saskatchewan. In Nova Scotia only the lower rate for 'respondent age 65+' was found to be significant.

### **iii) Education**

Differences in percentage of households reporting gambling expenditures by educational level of respondents are also found, with lower rates in each jurisdiction for both those with less than nine years of education and those with university degrees. However, the differences by education are not significant for Nova Scotia (Table 1). The relationship between education and income makes the interpretation of these frequencies difficult, but the picture becomes clearer in the multivariate analysis (Table 4), which controls for income as well as other variables. The likelihood of gambling is significantly lower in Saskatchewan and Canada for both households where the respondent has

university education and where the respondent has less than 9 years education, compared to high school graduates (the coefficients are negative for these two variable). However, only the lower rate of gambling amongst university-educated respondent households is significant in the Nova Scotia regression.

#### **iv) Household Composition**

Gambling rates also differ by type of household. In Nova Scotia, one person households have the lowest rate (65%), while households of married couples with single children have the highest rate (89%). In Saskatchewan, married couple households which include other adults are most likely to have gambling expenditures (93%), while the one person households are least likely (72%). In both provinces, a higher percentage of married couple households with children gamble than do lone parent households. The Saskatchewan pattern is almost identical to the national pattern.

A similar picture emerges when one looks at households with and without a spouse present. In all three jurisdictions, households with no spouse are less likely to have gambling expenditures than are households which include couples. This difference persists in the regression analysis (Table 4), where the probability of gambling is lower for households with no spouse, after controlling for other variables, and

is significant in the Canadian regressions. This supports the contention that gambling acts as an escape from everyday family stresses.

The findings are less clear, however, when we examine the impact of children on the likelihood of households having gambling expenditures. A higher percentage of households with children under age 15 report gambling expenditures, though these differences are not significant in Nova Scotia (Table 1). After controlling for other variables in the probit regression analysis (Table 4), the coefficient for two or more children in the household is positive for Saskatchewan, but negative for Nova Scotia and Canada. In other words, in Canada and Nova Scotia, households with two or more children are less likely to have gambling expenditures, while those in Saskatchewan are more likely.

Family work patterns may also affect the likelihood of gambling. As hypothesized above, two-earner couples (with their time pressures and work stresses) may be more likely to gamble than couples with only one or no full-time, steady earners. While the differences in gambling rates by the work patterns of couples are consistent with this hypothesis, they are only significant in Canada (Table 1). Thus, in Canada, 88% of households where both spouses work full time-full year (FTFY) have gambling expenditures, compared to 85% of households where one



person works FTFY and one works part-time full year (PTFY), or 84% of households with at most only one full-year worker. Interestingly, in the probit regression analysis (Table 4), the coefficient for 'respondent and spouse work FTFY' is positive and significant for Nova Scotia, when controlling for other variables such as the level of income. This is consistent with our aforementioned hypothesis.

#### **v) Sources of Income**

Households in Nova Scotia whose main source of income is from wages and salaries are also more likely to report gambling expenditures (88%), compared to households whose main income is from self-employment (77%), investments (50%) or government transfer payments (73%). The pattern is similar in Saskatchewan and Canada. Note, however, that the reporting rate for households whose main income source is from investments is lower in Nova Scotia (66%). In the probit regression for the probability of reporting gambling expenditures (Table 4), the coefficients on the dummy variables for most income from self-employment, investments, and government transfers are negative and significant for Canada (i.e. the likelihood of reporting gambling expenditures is lower than for wage and salary earners). In the Nova Scotia regression, however, only the negative self-employment income coefficient is significant and only the negative investment

income coefficient is significant in the Saskatchewan regression. As noted earlier, sample size considerations must be borne in mind in interpreting these differences.

We also find that a significantly higher proportion (90%) of Nova Scotia households with EI income report gambling expenditures compared to other households. This difference exists in Canada also, but not in Saskatchewan (Table 1). The coefficients for 'EI recipient' are also positive and significantly related to the probability of gambling in the probit regressions for Nova Scotia and Canada (Table 4), controlling for other variables. On the other hand, a lower percentage of households with social assistance income gamble in each jurisdiction, though this difference was not statistically significant in Nova Scotia (Table 1). The coefficient for 'social assistance recipient' is negative and significant in the probit regression for Canada, but it is not significant for Nova Scotia or Saskatchewan (Table 4). Thus, controlling for income and other household characteristics, EI recipient households have a higher probability of gambling, while social assistance recipient households are, if anything, less likely to gamble. Similarly, households below the low income cut-off (LICO) in each jurisdiction are significantly less likely to gamble than households above this cut-off (71% and 85% respectively in Nova Scotia).

## vi) Geographic Differences

Differences in gambling rates by size of area of residence may reflect the availability of gambling products and other leisure/recreational options, as well as cultural norms. This variable was available by province but not for the national sample. In Nova Scotia, gambling rates are similar in rural and larger urban areas, but lower in small (less than 30,000) urban areas (Table 1). Note that the only two urban areas larger than 30,000 are Sydney and Halifax, where casino gambling is an option. We expect the lack of other entertainment options in rural areas to contribute to the higher levels of gambling there, while in the larger urban areas the availability of more gambling venues (including casinos) may explain the higher rates. In the probit regression for Nova Scotia, however, the coefficient on the dummy variables for area of residence are not significant (Table 4).

In Saskatchewan, households in the larger urban areas have higher gambling rates compared to those in either small towns or rural areas (Table 1). This difference is confirmed in the probit regression for Saskatchewan, where the coefficient on the dummy variable for 'resides in urban area > 30,000' is positive and significant (Table 4).

To examine the impact of availability of gambling for Canada as a whole we compared provinces with casinos to those without, and those

with VLTs to those without. Table 2 shows that a higher percentage of households report gambling expenditures in provinces with VLTs (84%) than without (79%), but there is little difference between provinces with and without casinos. However, after controlling for other variables in the probit regression analysis (Table 4), the coefficients for the dummy variables for casinos and VLTs are both significant and positive. This indicates that living in a province which offers casino or VLT gambling increases the probability of households reporting gambling expenditures. When individual provinces are compared, households in Nova Scotia, Quebec, Saskatchewan and Alberta are more likely to report gambling (Tables 2 and 4).

#### **vii) Profile of Gambling Households**

In summary, then, higher household gambling rates are associated with higher income, non-university education, middle-age groups, married-couples who have the pressures of dual-earner work lives and, in Saskatchewan, the pressures of child-rearing. With the exception of EI-recipient households, households dependent on government transfer payments, including social assistance, are less likely to have gambling expenditures.

Table 3 provides a profile of gambling households compared to non-gambling households on some of the key variables. The income

distribution of households who don't gamble is skewed towards the lower income levels, compared to either the gambling population or the overall population. Non-gambling households are also disproportionately old or young, and a higher percentage of them have only elementary or university education, compared to gambling households. In Nova Scotia, the mean before tax household income for gambling households is \$46,925, compared to \$33,119 for non-gambling households, figures which are virtually identical to those in Saskatchewan. The average age of respondents in gambling households in Nova Scotia is 48, compared to 53 for non-gambling households.

### **3.2 The Intensity of Gambling**

While the great majority of households report gambling expenditures, there are important differences in the intensity of gambling. In the gambling literature, prevalence studies usually focus on the individual gambler, not the household, and take account of time as well as money spent on gambling (Shaffer, Hall and Bilt, 1997; Walker, 1996; Baseline Market Research, 1996; Wynne, Smith and Volberg, 1994; Wynne Resources, 1998). In this study, we focus on the household and can only measure intensity in terms of money spent.

We examine several different indicators of intensity of gambling for households with gambling expenditures. These include: actual

dollars spent on games of chance (Tables 7 and 8); gambling expenditures as a percentage of before tax household income (Tables 9 and 10); and the expenditure quintile distribution of gambling households (Tables 11 and 12). In addition, we categorize households into Low, Medium or High groups on the basis of the proportion of household income spent on gambling. Households in the Low group are in the bottom quartile (bottom 25%) of the distribution in terms of percent of income spent on gambling, while those in the High group are in the top quartile (Tables 13 and 14). Thus, while the top quintile group consists of the 20% of households who spend **the most money on gambling**, the High group consists of the 25% of households who spend **the highest share of their incomes gambling**. It should be noted that our high intensity groups of 20% or 25% of gambling households include many people who gamble without problems. We say this because prevalence studies typically find that problem gamblers constitute about 5% of all gamblers in society (Shaffer, Hall and Bilt, 1997; Baseline Market Research, 1996; Wynne, Smith and Volberg, 1994; Wynne Resources, 1998).

### **1) Overview of Distribution of Gambling Expenditures**

Table 2 shows mean gambling expenditures per gambling household in 1996 of \$267 in Nova Scotia, \$287 in Saskatchewan and

\$317 in Canada. Mean expenditure as a percentage of household income is .91% in Nova Scotia, .80% in Saskatchewan and .89% in Canada. Thus, while Nova Scotia households, on average, spend less money, they spend a relatively high share of their income on gambling.

The distribution of gambling expenditures across gambling households is skewed. Looking at the expenditure quintiles (Table 5), we find that in Nova Scotia the top 20% of gambling households account for 70% of total gambling expenditures (as in Saskatchewan and Canada). In Nova Scotia, the average expenditure per quintile ranges from \$7 in the bottom quintile to \$932 in the top quintile. The average for the fourth quintile group is only \$245, or about \$20 per month. The averages per quintile were slightly higher in Saskatchewan and Canada, reflecting the higher overall average spending levels.

In Nova Scotia, the mean household income is \$38,024 in the lowest gambling expenditure quintile, \$46,437 in the second quintile, and \$50,000 in each of the top three quintiles, while in Saskatchewan and Canada average income continues to increase in the top gambling expenditure quintiles (to \$56,429 and \$60,948 respectively). In other words, the amount spent gambling is not related to income in the top three quintiles in Nova Scotia, as it is in Saskatchewan and Canada. In Nova Scotia, while income is a significant determinant of whether a

household gambles or not, it has little impact on the amount of money spent by those who gamble.

Households in the Low, Medium and High gambling groups in Nova Scotia spend an average of .02%, .32%, and 2.98% of their household incomes on gambling and an average of \$15, \$141, and \$773, on gambling (Table 6). This compares with \$19, \$171 and \$791 in Saskatchewan and \$23, \$176 and \$893 in Canada. The average household income in the three groups is \$54,558, \$48,187 and \$36,788 in Nova Scotia. Thus, lower income households are more likely to be in the High intensity group in terms of gambling as a percentage of income, a point we elaborate on below.

## **2) Determinants of Differences in Gambling Intensity Across Households**

Tables 7 and 9 present descriptive statistics relating household characteristics to the level of gambling expenditures and the percentage of income spent gambling, while Tables 11 and 13 relate the same characteristics to membership in the top gambling spending quintile (those who spend the most dollars) and to membership in the High gambling group (those who spend the largest proportion of their incomes). Tables 8, 10, 12 and 14 give the results of multivariate analysis using these same variables.



### **i) Household Income**

As shown in Table 7 and Chart 3, gambling expenditures increase with household income in Canada. In Nova Scotia, they first increase and then decrease, though, only the lowest income group differs significantly from the overall mean. In Saskatchewan, the spread in spending between the lowest and highest income groups is noticeably higher than in Nova Scotia, with those under \$20,000 spending less on average than in Nova Scotia (\$156 compared to \$183), and those over \$80,000 spending considerably more than in Nova Scotia (\$363 compared to \$278). Our regression analysis confirms these differences (Table 8). The level of expenditures increases with income in Canada and Saskatchewan (significant positive coefficient for 'total household income before taxes', but not in Nova Scotia, controlling for other variables. The significant negative coefficient for the 'total household income before taxes, squared' variable for Canada and Saskatchewan shows that gambling expenditures increase at a decreasing rate as income rises. In Nova Scotia, however, the regression results suggest that while income levels affect whether households gamble or not, they do not seem to affect how much those who gamble spend on average.

Focusing just on households who gamble most intensively, as measured in dollars spent (top expenditure quintile), a similar pattern

emerges. In Table 11 there is a clear increase by income group in the percentage of households who are in the top expenditure quintile in Saskatchewan and Canada, but not in Nova Scotia. This is also borne out in the probit regression (Table 12), where income is not a significant determinant of being in the top quintile in Nova Scotia, as it is in Saskatchewan and Canada. The distribution of gambling expenditures across income groups is more even in Nova Scotia (also see Table 5).

Income levels are, however, related to the **proportion of income** spent on gambling in Nova Scotia. In the regression analysis (Table 10), the coefficient on 'total household income before tax' is negative and significant in each jurisdiction, confirming that poorer households spend a higher proportion of their income on gambling. In this sense, gambling as a "tax" is regressive. Table 9 and Chart 2 show that in Nova Scotia gambling households in the lowest income group spend 1.9% of their income on gambling on average, while those in the highest income group spend only .3%. In Saskatchewan, the percentage of income spent by the lowest income group is considerably lower (1.2%), while that spent by the highest income group is higher (.4%). The Saskatchewan figures are similar to those for Canada. It seems, then, that gambling is **more** regressive in Nova Scotia than in Saskatchewan or Canada as a whole.

Looking at the relationship of household income to Low, Medium and High intensity gambling (as a proportion of income), the likelihood of being in the High group declines as household income increases in each jurisdiction (Table 13). In both Nova Scotia and Saskatchewan, 35% of households with incomes less than \$20,000 are in the High gambling group, compared to 11% and 10% respectively of households with incomes of at least \$80,000. However, only 15% of households in the lowest income group are in the Low gambling group in Nova Scotia compared to 28% in Saskatchewan, suggesting, once again, that lower income groups in Nova Scotia are gambling relatively more of their incomes than their Saskatchewan counterparts (see also Table 6).

In summary, then, among households who gamble in Nova Scotia, income is not found to be a significant determinant of the amount spent on gambling. Indeed, the highest gambling expenditure quintile of households is a diverse group in terms of income (see Table 3). As a result, however, lower income households are disproportionately represented in the High gambling group in Nova Scotia, which spends the largest share of its income on gambling (Table 6). This regressive pattern is more pronounced in Nova Scotia and potentially more lower income households are financially at risk here than elsewhere.

A similar picture emerges when we examine gambling expenditures by household income quintile. In Nova Scotia, with the exception of the lowest income quintile, which accounts for only 11% of total gambling expenditures, the percentages contributed by the other income quintiles are similar (21-24%). In Saskatchewan, on the other hand, the lowest income quintile accounts for only 7% of gambling expenditures and the percentage rises with each quintile, so that the highest income quintile is contributing 28% of gambling expenditures. In Canada, the percentage of total gambling expenditures rise from 11% in the lowest income quintile to 26% in the highest income quintile.

## **ii) Age**

In terms of age, we expect that households with more time on their hands, and fewer other demands on their disposable income will tend to spend more money on gambling. This is confirmed by the data, as respondents in the older age groups (age 55 and over in particular) tend to spend higher amounts as well as a higher proportion of their income on gambling. In each jurisdiction, those in the 55-64 age category spend the most money on average, and a relatively high proportion of their incomes on gambling (Tables 7 and 9). Furthermore, the coefficient for the dummy variable for 'respondent age 55-64' in the regression analysis is positive and significantly related to both the level

of gambling expenditure and the proportion of income spent on gambling (Tables 8 and 10). In Canada, households where the respondent is a senior are less likely to gamble, but those households with seniors who do gamble spend more money than middle aged households, after controlling for other variables (Tables 4 and 17). In the Saskatchewan regressions, the positive coefficients for 'respondent age 65+' indicate that both gambling expenditures and the proportion of income spent are higher for senior households. This variable is not significant in the Nova Scotia regressions. Thus, seniors do not seem to be as involved in gambling in this province as they are elsewhere.

The likelihood of being in the top quintile of gamblers does not differ significantly by age group in Nova Scotia, in either the descriptive or multivariate analysis (Tables 11 and 13). In particular, compared to Saskatchewan and Canada, a higher percentage of younger households and a lower percentage of older households are in the top quintile in Nova Scotia. The coefficients for both 'respondent age 55-64' and 'respondent age 65 +' are positive and significant in the Saskatchewan and Canada regressions (Table 12). Households in the lowest age group (respondent age 15-25) are significantly less likely to be in the top gambling quintile in Canada, but not in Nova Scotia or Saskatchewan, according to the regression results (Table 12).

In Nova Scotia, households in both the youngest and oldest age groups have a relatively high likelihood (35% and 36%, respectively) of being in the High intensity group (gambling expenditures as a proportion of income) compared to middle age groups. In Canada, those in the youngest group have only a 20% likelihood of being in the High intensity group compared to 40% for the senior group (Table 13). The Saskatchewan rates are similar to the Nova Scotia rates.

In summary, on all measures of intensity the senior gambler is not as pronounced in Nova Scotia when compared to Saskatchewan and Canada. There is, however, some indication that younger gamblers are gambling relatively more intensely in both Nova Scotia and Saskatchewan when compared to Canada overall.

### **iii) Education**

The findings related to education are particularly striking. In each jurisdiction the highest average gambling expenditures (Table 7) are by households where the respondent has less than 9 years of education (\$440 in Nova Scotia, \$425 in Canada and \$342 in Saskatchewan). In the regression analysis, the coefficient on this variable is significant and positively related to both the level of gambling expenditures and gambling as a proportion of income in Nova Scotia and in Canada, though not in Saskatchewan (Tables 8 and 10). Thus, in

Nova Scotia, those in the lowest educational group are **not** more likely to gamble, but those from this group who do gamble spend **more** than other educational groups. This may reflect cultural norms regarding leisure/recreational pursuits, or the attraction of a "win" for people whose labour market opportunities are limited. At the other end of the spectrum, households with university educated respondents spend significantly less on gambling in all jurisdictions (Table 8). And in Saskatchewan, they spend a significantly lower proportion of their income on gambling, after controlling for other factors (Table 10).

The findings are even more dramatic when we look at households in the top quintile of gambling spending. In Nova Scotia, fully 40% of households where the respondent has less than 9 years of education are in the top quintile, compared to rates of 22% and 25% in Saskatchewan and Canada respectively (Table 11). The significance of this relationship is confirmed in the probit regressions, where for Nova Scotia the coefficient for the dummy variable 'respondent less than grade 9' is significant and positively related to being in the top quintile, after controlling for income and other variables (Table 12). Similarly, the percentage of those in the lowest educational group who are in the High group (based on gambling expenditures as a proportion of income) is 59% in Nova Scotia, compared to 41% and 44% respectively in

Saskatchewan and Canada (Table 13). University educated households, on the other hand, are less likely to be in the top quintile or in the High group in each jurisdiction and the significance of this relationship is confirmed in the probit regressions (Tables 11, 12, 13, 14).

In summary, gambling expenditures are generally inversely related to education on all measures of intensity in all jurisdictions. Households with post secondary education spend distinctly lower dollar amounts and lower proportions of income on gambling. The Nova Scotia pattern differs significantly from the other jurisdictions in terms of the very high gambling expenditures by households in the lowest educational group.

#### **iv) Household composition**

Differences in spending levels by household type (Table 7) show that lone parent households who gamble have the lowest expenditure levels in both Nova Scotia and Canada. This holds true when mean levels of expenditure per adult are used as well. Married couple households with single children spend less than couples without children in each jurisdiction (also less per adult). This pattern also prevails when we consider the percentage of households of different types who are in the top quintile (Table 11). Lone parent households are the least likely to be in the top quintile (11%), while married couples with children are



less likely to be in the top quintile than those without children or those in extended households. The percentage of households consisting of married couples with single children who were in the High group (based on proportion of income spent on gambling) in each jurisdiction was also relatively low (21% in Nova Scotia, 14% in Saskatchewan and 17% in Canada, though the differences by household type were not significant in Nova Scotia).

Children may reduce the amount of income (and time) available for leisure/entertainment pursuits, including gambling, and change the mix of entertainment options chosen. In the regression analysis, the negative relationship between presence of children and the level of expenditures is significant for Canada, but not for Nova Scotia or Saskatchewan (Table 8). Similarly, the presence of children is associated with a lower probability of being in the top spending quintile in Canada (Table 11, 12). The presence of children is not significantly related to the proportion of income spent on gambling in any of the regressions (Table 10), though the average percentage of income spent on gambling is lower for households with children (Table 9), as is the percentage of households with children who are in the High gambling group in Saskatchewan and Canada (Table 13).

The absence of a spouse in a household is associated with lower average spending on gambling (Table 7), and this is significant, after controlling for other variables, in the Nova Scotia regression (Table 8). Similarly, a lower percentage of households without a spouse are in the top spending quintile than those with a spouse (Table 11), though this relationship is only significant, after controlling for other variables, in the Canada regressions (Table 12). Average gambling expenditures as a percentage of income, on the other hand, are higher in households without a spouse present (Table 9), though this relationship is not significant in the regression analysis (Table 10). Households with no spouse are also more likely to be in the High gambling group in Saskatchewan and Canada, but not in Nova Scotia.

To summarize, then, in Nova Scotia couples tend to spend more money gambling than other types of households, though they do not seem to spend a higher proportion of their income. Furthermore, in Nova Scotia, children reduce the likelihood of gambling, but not the dollars or share of income spent, after controlling for other factors. In Canada, however, the presence of children does significantly lower gambling spending as well as the probability of being in the top spending quintile.

For couples, we examine whether work patterns affect the intensity of gambling. No clear pattern emerges. In Nova Scotia, the highest average spending and spending as a percentage of income, is in households where one partner works full-time full-year and one works part-time full-year. In all likelihood, this pattern reflects a combination of available time and available money (Tables 7 and 9). This is consistent with the regression result for Nova Scotia, where the coefficient for 'respondent and spouse work full time' is significant, and negatively related to the level of gambling expenditures (Table 7). Thus, while couples who work both full-time full year are more likely than other couples to gamble, their spending is relatively low. The work pattern variables are not significant in any other regression.

#### **v) Sources of Income**

We find few significant differences in either the amount of money or proportion of income spent on gambling in relation to main sources of income, after controlling for other factors. In the Nova Scotia regressions (Tables 8 and 10), the only significant income variable is the dummy variable for most income from other sources (compared to most income from wages and salaries), which has a significant (negative) coefficient in the regression for level of gambling expenditures (Table 8). In the Canadian regressions, both the amount and proportion of

income spent gambling are significantly higher for those whose main income source is from investments, after controlling for income and other variables. This may reflect a risk-taking personality, however in the Saskatchewan regression the relationship is reversed! In Saskatchewan, gambling expenditures are also significantly lower for households whose main source of income is government transfers (Table 8).

One such transfer payment is EI. Spending levels do not vary significantly between EI recipient households and other types of households. Nor does the proportion of income spent by those who gamble vary significantly (Tables 8 and 10). On the other hand, social assistance recipients in Nova Scotia and Canada spend a lower proportion of their income gambling, but those in Saskatchewan spend a higher proportion (and have a higher level of spending), as demonstrated in the regression analysis (Tables 8 and 10). More analysis of the social assistance population in Saskatchewan is needed in order to understand this finding.

Sources of income are also not significant determinants of being in the top gambling expenditure quintile in Nova Scotia (Tables 11 and 12). In the Saskatchewan regression, however, the coefficient for most income from government transfers is negative and significant (Table 12),

as is the coefficient for most income from investments. The latter is also significant in the Canadian regressions.

In each jurisdiction, households whose main source of income is wages and salaries are somewhat less likely than others to be in the High group (based on proportion of income spent on gambling), while those whose main source of income is government transfers are somewhat more likely to be in the High group (Table 13). Receipt of EI does not affect the probability of being in either the top quintile or the High group in any jurisdiction. Social assistance recipient households had a lower probability than others of being in the top quintile in Nova Scotia and Canada (Tables 11 and 12), though they had a higher probability of being in the High intensity group in relation to share of income spent in Canada and Saskatchewan (Table 13).

In summary, there is no indication that households who depend on government transfer payments are gambling more intensely than other households in Nova Scotia. In particular, social assistance recipients in Nova Scotia spend a lower percentage of their income on gambling, and are less likely to be in the top quintile, controlling for other factors.

## **vi) Geographic Differences**

Mean gambling expenditure levels (Table 7) are higher, on average, for households in urban areas in Nova Scotia (\$307) and in Saskatchewan (\$296) compared to smaller communities or rural areas, while the percentage of income spent gambling is highest in rural areas in both provinces (Table 9). However, these differences are not significant in our regression analysis (Tables 8 and 10).

We do, however, find that households in urban areas are significantly more likely to be in the top gambling expenditure quintile in both Nova Scotia and Saskatchewan, indicated by the positive and significant coefficients for the variable 'resides in urban area > 30,000' in the probit regression (Table 12). While 56% of all gambling households in Nova Scotia live in these urban areas, 69% of households in the top quintile do so (Table 3). In Nova Scotia, furthermore, urban households are also more likely to be in the High group in terms of the proportion of income spent gambling (Table 14).

### **3.3 Conclusion**

There are, then, differences in the likelihood and intensity of gambling, related to both consumer characteristics and the availability of gambling. Consumer choices reflect demographic and social characteristics that impact on tastes as well as available time and money. A key finding of our study is that while household income is positively

associated with the **likelihood** of gambling in each jurisdiction, income is not a predictor of the **amount** spent on gambling in Nova Scotia, as it is in Saskatchewan and Canada. Furthermore, there is considerable representation of lower income households in the top gambling expenditure quintiles. As a percentage of income, lower income groups spend more on gambling products than do other income groups. This finding is more evident in Nova Scotia than in Saskatchewan or in Canada overall. This *regressive* relationship implies that there may be considerable economic costs borne by lower income groups who can least afford the financial problems associated with heavy gambling.

In terms of age, we find higher gambling rates among middle age groups across all jurisdictions, as expected. Young and senior gamblers are less in evidence in Nova Scotia than in Saskatchewan. The findings on intensity of gambling, however, are somewhat different. Households in the 55-64 age range in all jurisdictions spend the highest amount and proportion of income on gambling. While seniors are less likely to gamble than middle age groups, those who do gamble spend a higher proportion of their income on gambling products in all three jurisdictions. However, this pattern is not as strong in Nova Scotia as elsewhere.

In Nova Scotia the top quintile of gamblers is rather diverse in terms of age, with no group overrepresented or underrepresented. This

differs from Saskatchewan and Canada, where older households are *more* likely and younger households are *less* likely to be top spenders than their middle aged counterparts. Moreover, we discover that both the youngest and oldest age groups have a strong likelihood of being in the High intensity group (on the basis of **proportion** of household income spent on gambling), especially in Nova Scotia and Saskatchewan. Households in the middle age groups, it seems, have the highest rates of gambling, but they tend to gamble in moderation, both in absolute dollars and in relation to their income.

Convenience gambling is now distributed across the age structure. The proliferation of relatively de-skilled gambling technologies in the form of slot machines, video lottery devices and instant lottery products appears to be contributing to the emergence of two new types of gamblers: namely, the youthful and the elderly gambler. While these groups are starting to gamble more intensely, they may also have more discretionary income (and time) than the middle age groups. For some, however, gambling may have serious negative social and economic impacts.

Similarly, the spread of the convenience gambling marketplace is evinced in the way that gambling expenditures are dispersed geographically. Both the opportunity to gamble, and the interest in gambling may vary by location. With the exception of casinos,



gambling products are widely available in both provinces. However, in Nova Scotia gambling rates are not significantly different between rural, small town and urban areas. In Saskatchewan they are significantly higher in the larger urban areas and in Canada as a whole there is an increased likelihood of gambling in provinces where casinos or VLTs are available. Gambling, it seems, is more pervasive across Nova Scotia.

Similarly, for those who gamble, the size of area is not related to the amount of money or the proportion of income spent on gambling (in either province). This suggests that many new gambling products are as available and accessible in villages and towns as in larger metropolitan centers. Gambling has penetrated the entertainment and recreational service sectors of both urban and rural economies. However, we find that there are variations in the **intensity** of gambling activities by size of area. Households in urban communities are more likely to be in the top gambling quintile and in the High gambling group. This may be because the "casino effect" captures more affluent gamblers in metropolitan areas or because the urban environment contains more gambling opportunities and sites. In any event, future research will need to develop a more refined ecological analysis and relate gambling expenditures to specific types of gambling activity.

In terms of education, we find little correlation between level of education and the likelihood of gambling in Nova Scotia, with the

exception of lower rates for university-educated households. Again, convenience gambling is widespread, offering something for almost everyone. We find, however, that gamblers in the lowest educational group gamble **more intensely** in Nova Scotia than elsewhere. Households in the lowest educational group have the highest average gambling expenditures. Furthermore, four out of every ten households in the top gambling quintile and six out of every ten households in the high intensity gambling group are households where the education of the reference person is less than nine years.

In Saskatchewan and Canada, on the other hand, lower educational groups are less likely to gamble overall. Furthermore, we do not find the high intensity of gambling for this group in Saskatchewan, as we do in Nova Scotia and, to a lesser extent, Canada. The findings overall are more consistent for the highest educational group (university certificate or diploma). Households in this group in each jurisdiction are less likely to gamble. They spend less on gambling, and are less likely to be in the top quintile or in the High intensity gambling group.

This pattern, where households with lower educational levels spend disproportionate amounts of their income on gambling, confirms that the de-skilled gambler is an important consumer in the convenience marketplace in Nova Scotia. Most games of chance require no skill, education, planning or pre-knowledge to play. Returns and results,

moreover, are often instant and "winings" provide a sense of excitement, social approval and a chance to get ahead which may be lacking in other spheres of life. While the popular appeal of gambling certainly includes diverse educational groups, the proliferation of de-skilled gambling technologies seems to be potentially pernicious for those players who come from households with the least education. Some observers have called gambling "a tax on the stupid" since gambling revenues come disproportionately from society's have-nots (Clotfelter and Cook, 1989:215-234; Eadington, 1996: 250).

Gambling rates and expenditures, we find, also vary by type of household. One person households have the lowest rates of participation, while married couples, with either children or relatives, have the highest rates of participation. Gambling, it seems, offers an escape from everyday family stresses. Similarly, one person households have the lowest mean gambling expenditures, while households comprised of married couples spend the most on gambling. In the Nova Scotia regressions, we find that households with couples spend more money, though not a higher **proportion** of their income on gambling, than other types of households. Furthermore, the presence of children in Canadian households is correlated with lower gambling spending amounts and these households are less likely to be found in the top gambling quintile. In Nova Scotia, however, while the presence of children in households

does reduce the likelihood of gambling, it does not reduce the dollar amount or the proportion of household income spent on gambling.

Another interesting finding from our research is that households whose main source of income is wages and salaries are more likely to report gambling expenditures, in all three jurisdictions. However, we find no significant differences in either the amount of money or the proportion of household income spent on gambling when we compare this source of income to others. We do find, however, that households with employment insurance income have a higher probability of gambling in Nova Scotia. Households with social assistance income, on the other hand, are actually less likely to gamble. Most importantly, we find no evidence that households who depend on government transfer payments gamble more *intensely* than other households in the province, either in terms of dollars or proportion of income spent. Indeed, households with social assistance recipients actually spend a lower percentage of their income on gambling than do other households, and controlling for other factors, they are less likely to be in the top gambling quintile.

The discussion above concerning household composition and sources of income suggests that the growth of the convenience marketplace has legitimated gambling in most types of households. We find no evidence that gambling is segmented in one person or lone parent

families or that it disproportionately takes money from those who are receiving government assistance. This suggests that the normalization of gambling in Nova Scotia is well underway and that heavy gambling, as measured by intensity of expenditures, is more appropriately determined by factors such as age, before tax income, and education rather than household composition or income sources.

#### **4. GAMBLING AND FINANCIAL WELL-BEING**

As has been demonstrated above, there is considerable variation in the amount of money, and the proportion of income households spend on gambling. While most households are gambling in moderation, some are not. How is the financial well-being of households affected? Is spending on necessities such as food and shelter being compromised? Is loss of savings occurring? Is financial planning for the future, such as RRSP contributions being undermined?

We find that income is not a significant determinant of the amount spent on gambling by households who gamble in Nova Scotia. Indeed, the highest gambling expenditure quintile of households is a diverse group, containing many households who can well afford this expenditure. On the other hand, those who are spending relatively high proportions of their incomes gambling (who come disproportionately from lower income groups) may be jeopardizing their financial well-being.

Given these patterns, we expect that there will be few differences between gamblers and non-gamblers on most of our indicators of financial well-being, and few differences by the amount of money spent gambling (after controlling for income). However, we do

expect some negative impacts on those households who gamble more intensely in relation to their incomes.

#### **4.1 Spending on Necessities**

Table 15 compares spending on items related to financial well-being by households who gamble and those who do not. Spending on food for home and on principle accommodation are used as measures of spending on the basics of food and shelter. On average, households who gamble also spend more on these items in each jurisdiction, compared to households who do not gamble. This is not surprising, since the probability of gambling is positively related to income, as is spending on food and accommodation. Note also that gambling households spent a lower share of their income on these necessities than non-gambling households, indicating higher discretionary incomes.

We estimated a set of regressions to test whether differences in spending on these necessities are related to gambling behaviour, after controlling for income and demographic characteristics. For each type of expenditure we tried three different specifications of "gambling": (a) using dummy variables for being in the Low, Medium, or High gambling group (compared to non-gambling households); (b) using 'expenditures on gambling' as well as a dummy variable for whether the household reports any gambling expenditures; and, (c) using 'gambling

expenditures as a proportion of household income ' as well as a dummy variable for whether the household reports any gambling expenditures.

Generally, the coefficients on the gambling variables are not significant predictors of expenditures on food for home. Furthermore, in the few regressions where these coefficients are significant, they are positively related to spending on food (i.e. households who gamble spend more on food at home, after controlling on other variables, including income). Neither the amount of money, nor the proportion of income, spent gambling is a significant predictor of expenditures on food at home. In the regression using the Low, Medium, and High variables, the coefficients were mostly positive, indicating *higher* spending on food by these groups than by the non-gambling households. The only instance where food expenditures are significantly lower than for non-gambling households, is indicated by the significant negative coefficients for the Low gambling group variable in the regression for Canada. The regressions using the Low, Medium, and High gambling variables are reported in Table 16.

No gambling variables have significant coefficients in the regressions for expenditures for principle accommodation for Nova Scotia or Saskatchewan, indicating that gamblers do not spend differently than non-gamblers on this necessity. However, the regression



for Canada shows that gambling households spend more than non-gambling households on their principle accommodation (Table 17). Amongst gambling households, however, expenditure on principle accommodation decreased as gambling expenditures increased (see significant negative coefficient for 'expenditures on gambling' in Table 17). The proportion of income spent gambling was not a significant predictor of spending on principle accommodation in any jurisdiction. However, the intensity of gambling variables (Low, Medium, High) have significant positive coefficients in the all Canada regression.

These findings, then, suggest that gambling expenditures generally do not negatively affect spending on the basic necessities of food and shelter by households.

#### **4.2 Changes in Net Worth**

We also study how indicators related to household debt are affected by gambling. The FAMEX data set does not include a measure of the level of debt, or even changes in debt levels, but it does have a measure of the 'net change in assets minus liabilities'. Interpretation of this variable is difficult, as it measures the **change** in net worth, not its level. Thus, a very wealthy household, for example, could have a negative change in net worth and still be rich, while a household with negative net worth could show a positive change, as debts are paid

down. This measure does, however, indicate whether the household is accumulating or disaccumulating wealth (or, alternatively, moving from a worse to a better debt position).

As shown in Table 15, we find little difference between gambling and non-gambling households on this variable. On average, both increased their net worth, although gambling households improved more. Conversely, as measured as a percentage of income, the average change for gambling households was slightly negative in the Nova Scotia and Canada cases. This picture becomes clearer in the regression analysis, where the level of gambling expenditures is negatively related to the net change in assets minus liabilities in each jurisdiction. This negative pattern holds for the proportion of income spent on gambling in Canada and Saskatchewan as well (i.e. the change in net worth worsens as gambling intensity increases in either absolute or relative terms, other things equal). In the Nova Scotia and Canada regressions, there are also significant negative coefficients for the 'High gambling' variables, indicating that for this group in particular gambling is negatively affecting net worth (Table 18).

#### **4.3 Saving for Retirement**

Another indicator of financial well-being available in the FAMEX data set is the net change in RRSP balances - whether

households are adding to, or using up, these retirement savings. Again, it is the direction of change, not the level of change, which is captured in this measure, and this can be negative (even for those with high RRSP balances). Table 15 shows that the changes in RRSPs are lower for non-gambling households compared to those who gamble, in all jurisdictions, reflecting in part the different age distributions of the two groups. The regression analysis controls for age, income and other variables which may also affect net change in RRSP balances. In the regressions, it is not whether households gamble, but rather how much gambling households spend that affects the change in RRSPs. The coefficient for the level of gambling expenditures is significant and negatively related to the change in RRSP balances in each jurisdiction (Table 19). Gambling as a proportion of income is less clearly related to the change in RRSP balances - the only significant (and negative) coefficients are found in the regressions for Canada, for the 'gambling expenditures as a proportion of income' variable and the 'High gambling group' variable.

These findings support the hypothesis that the amount spent on gambling takes away from savings for retirement. However, bearing in mind the evidence that gambling expenditures are positively related to spending on both food and shelter (Tables 16 and 17), it may be that the key distinction is between spenders and savers, rather than between

gamblers and non-gamblers. This possibility is explored further in Section 5 where we examine a broader range of consumption expenditures.

#### 4.4 Saving

We use total household income minus total expenditures as an indicator of the amount households saved (or dissaved) in the year (i.e. the *change* in savings, not total savings). As with other indicators of financial well-being in each jurisdiction (Table 15), gambling households, on average, save more than non-gambling households. However, the regression results show a negative relationship between gambling and saving, after controlling for other important determinants of saving such as income, age and household size (Table 20). The significant negative coefficients on the gambling variables indicate that gambling households save less than non-gambling households, and that savings for the year decrease as gambling expenditures increase. In regressions using other gambling variables (not reported), the proportion of income spent on gambling has a significant negative impact on saving in Canada and Saskatchewan, but not in Nova Scotia. However, in Nova Scotia (and Canada) the coefficients for the Medium and High gambling variables are negative and significant. In other words, households who

spend a relatively low proportion of their incomes gambling are not saving less, only those who gamble more intensely are saving less.

#### **4.5 Summary**

We find no evidence that gambling has a negative impact on spending for the necessities of food and shelter in Nova Scotia. Neither the level nor the intensity of gambling (as a proportion of income) explains variations in the amounts that households spend on these basic items, after controlling for other variables.

However, we do find evidence that gambling negatively affects households' ability to save and plan for their financial futures. Our regression results indicate that in each jurisdiction the net change in assets minus liabilities, the net change in RRSPs, and the net change in savings all decrease as gambling expenditures increase. Households in the High gambling group, in particular, are putting their financial futures at risk.

## 5. GAMBLING AND OTHER DISCRETIONARY AND LEISURE SPENDING

Spending on games of chance may be either a substitute or a complement to other discretionary consumer spending, particularly that related to leisure and entertainment (Marfels, 1997). Is gambling displacing money from other activities or is it part of an expanding package of recreational spending by consumers? In our convenience model, we argue that the growth of gambling has been fueled by these available consumer dollars. Furthermore, governments and other providers strive to make gambling products more accessible and convenient in order to attract local consumer dollars. Unlike "destination" gambling, however, these products compete with other recreational options in the region. Thus, while gambling expenditures provide a positive consumption benefit for participants, they may not always represent net increases in consumer spending. However, while gambling has grown faster than other entertainment and recreation services in recent years, most have experienced positive growth. Thus, these goods and services have been competing in a growing marketplace.

In this section, we focus on spending patterns of households on these leisure/discretionary items. How are gambling expenditures of

households related to other categories of spending which would be considered "discretionary"? The distribution of spending may be such that households who are spending money on gambling are also spending money on other leisure activities, while non-gambling households may be participating less in all forms of leisure spending. At the level of the household, we expect that spending on leisure activities will be positively related to income, and will vary over the life cycle as interests, responsibilities, and other demands on income and time change. In fact, we expect that the determinants of other forms of leisure spending are similar to the determinants of spending on gambling. Thus, we use similar explanatory variables as in the earlier analysis of gambling expenditures.

We ask the following questions. Do the expenditures of gamblers on other recreational/leisure goods and services differ from non gamblers, controlling for other factors? Amongst gambling households, does the intensity of spending on gambling affect the amount spent on other items? In general, we expect the answer to the first question to be that gambling households are at least as active as non gambling households in the markets for other leisure products and perhaps more active (i.e. they are into spending on entertainment/leisure activities). With regard to the second question, we expect mainly a

positive relationship (complementary). We expect that any tradeoffs between gambling and other leisure spending will be concentrated among those households who gamble most intensely. We do not expect "average" gambling households to be giving up other recreational spending.

Table 21 presents average expenditures on a series of items by gambling and non-gambling households (including recreation, recreation services, home entertainment, food from restaurants, and alcohol from licensed premises). In every case, average spending is somewhat lower for non-gambling households than for those who gamble. The most dramatic differences are in spending on alcohol from licensed establishments and on food from restaurants. For example, in Nova Scotia, households who gamble spend \$1,361 on food from restaurants, compared to \$1,234 for non-gambling households. Clearly, there is a complementarity between gambling and these activities. Gambling households in Nova Scotia also spend a larger share of their incomes on these recreational items than do non-gambling households (while the opposite is found in Saskatchewan). Note, also, that in Nova Scotia, gambling households spend a lower proportion of their incomes (and fewer dollars in total) on gambling than on every other recreational item except alcohol.



The regression analysis relating spending on each item to income, age, education and other demographic variables generally shows spending on all items to be positively related to income and negatively related to age, though not all age variables are significant in each jurisdiction. Spending is also generally higher in households without a spouse and without children. This may be because these households have more disposable income and time to consume.

Variables were included in these regressions to determine if gambling activity affected spending, after controlling for demographic variables (Tables 22, 23, 24, 25, 26). As in the regressions reported in Section 4, we tried three different specifications of gambling behaviour: (a) using dummy variables for being in the Low, Medium, or High gambling group (compared to non-gambling households); (b) using 'expenditures on gambling' as well as a dummy variable for whether the household reports any gambling expenditures; and, (c) using 'gambling expenditures as a proportion of household income' as well as a dummy variable for whether the household reports any gambling expenditures.

In every regression where a gambling variable has a significant coefficient, the sign is positive. In other words, spending on the other discretionary items is unaffected by gambling, is higher for gamblers, or increases with the intensity of gambling. Thus, if anything, gambling

expenditures are complements, not substitutes, for spending on recreation, alcohol, food from restaurants, and home entertainment.

In the Nova Scotia regressions, for the most part the coefficients for the gambling variables are not significant, indicating that gambling activity has no impact on the other types of spending, after controlling for factors such as age and income. However, the coefficient on the dummy variable for households reporting gambling expenditures was significant and positive in the regressions for total recreation spending and for spending on food from restaurants (Tables 23 and 26). The coefficients for the gambling intensity variables (dummies for High and Low proportion of income spent) were significant in the Nova Scotia regression for Alcohol from licensed establishments, indicating these households have higher levels of alcohol expenditure than non-gamblers (Table 25). Similarly, the significance of the High and Medium gambling dummy variables in the Nova Scotia regression for spending on food from restaurants indicates that those who spend a relatively high proportion of their incomes gambling also spend more on restaurant meals (Table 26).

In summary, then, for Nova Scotia we do not find gambling behaviour to be related to spending on home entertainment or recreation services, but we do find some positive relationship between gambling

expenditures and spending on total recreation, food from restaurants and alcohol from licensed establishments. While the positive relationship between gambling and eating out will be welcome news to restaurant owners, the positive relationship between spending on alcohol spending and spending on gambling may be cause for alarm. In particular, it is the High gambling group of households who are spending more on alcohol.

The findings for Saskatchewan are similar, except no significant relationship is found between gambling and expenditures on food from restaurants. In the regressions for Canada, gambling expenditures are positively related to each of the other leisure/entertainment spending categories (Tables 22, 23, 24). Higher spending levels for all items are also found for households in the High gambling group. Furthermore, higher spending levels for most items are found for households in the Medium gambling group (Tables 25 and 26).

In contrast to the generally positive relationship between gambling expenditures and spending on leisure/recreation/entertainment, we find a negative relationship between gambling and charitable donations. In Table 21, average charitable donations are lower for households with gambling expenditures compared to those without, in each jurisdiction. In the regressions explaining the level of charitable donations by household, the gambling variables do not have significant

coefficients in the Nova Scotia or Saskatchewan cases. However, in the Canadian case, the coefficient for the dummy variable for households reporting gambling is significant and negative, as are the coefficients for gambling groups (High, Medium, Low) compared to non-gambling households (Table 27). Thus, a "cost" of gambling is the lower charitable donations which may result, putting increased demands on government services.

## **6. ADDENDUM - DIFFERENCES BY TYPE OF GAME**

### **6.1 Introduction**

In this section, we report on the Statistics Canada special runs on expenditures for specific games of chance in Nova Scotia, Saskatchewan and Canada for the years 1996 and 1997. These results are not directly comparable to results derived from the microdata file. The list of variables in the following analysis is somewhat different from our earlier list. Categories within variable groups are collapsed (i.e., fewer educational levels), due to sample size restrictions. Furthermore, some variables of interest were not available in the special runs. While the findings in this section are not always directly comparable to the findings presented above, the special runs do provide insight into the differences among games of chance and, therefore, complement our previous analysis.

The special runs address the issues discussed in Section 3 above entitled Profiles of Gambling Households. We are unable to replicate the analysis of sections 4 and 5 which relates gambling to other expenditures. Tables 28 to 37 provide information on the percentage of households reporting expenditures on different games of chance, and the average expenditures of those households who engage in each type of

game, by household characteristics. These characteristics include income group, age of reference person, education of reference person (for 1996 only), size of area of residence, number of full-time earners, and household size.

Tables 28 to 30 present special run data for Nova Scotia, Saskatchewan and Canada for 1996, while Tables 31 to 33 present the similar data for 1997. Tables 34 and 35 provide the 1996 data for the Atlantic and Prairie regions, respectively, while Tables 36 and 37 provide the regional data for 1997. It is important to note that the 1996 data is from the FAMEX survey, while the 1997 data is from the new Survey of Household Spending. The results from these two data bases are not fully comparable since there are differences in sample sizes and in the questionnaires. Furthermore, there are some differences between the 1996 FAMEX microdata file and the complete 1996 data file used in the special runs. This results in minor differences in the two estimates of percentage of households reporting expenditures and the average expenditures per household. For example, winnings are treated differently in the two data sets, as noted in the methodology section above.

In our discussion of the special runs we begin in Section 6.2 with the 1996 data. We add to our conclusions found in Section 3 of the

report by discussing how patterns differ for particular types of games of chance in Nova Scotia, Saskatchewan and Canada. If there are empty cells in the provincial tables, we sometimes refer to data from the Atlantic and Prairie regions. Government-run lotteries and bingos are reported separately in the data, but unfortunately, casinos and slot machines (VLTs) are grouped together into one category. We comment on differences in participation in each of these gambling activities, and on the intensity of gambling, as measured by average expenditures. We do not comment systematically on non-government lottery and raffle tickets, as our focus is on government sponsored gambling. Unfortunately, we are not able to replicate the other indicators of intensity used in the microdata analysis reported above.

In Section 6.3 we comment on the similarities and differences in patterns of gambling from 1996 to 1997.

## **6.2 Likelihood of Gambling and Amount Spent, by Type of Game**

In Nova Scotia in 1996 (Table 28), the highest percentage of households (73%) report expenditures on government-run pool and lottery tickets (government lotteries), followed by casinos and slots (28%) and bingos (15%). The highest average expenditure per household on gambling in 1996 is on government lotteries (\$149) followed by bingos (\$91), casinos and slot machines (\$50). In Saskatchewan (Table

29), the pattern is similar in terms of percentage of households reporting each type of game, but different in terms of expenditure levels. Government-run pool and lottery tickets are still the number one games of chance in terms of average household expenditure (\$132). Casinos and slot machine gambling, however, is second in Saskatchewan, accounting for an average household expenditure of \$80, which is significantly more than what is spent on these forms of gambling in Nova Scotia. In Saskatchewan, on the other hand, average spending on bingo is \$69, which is much less than that spent in Nova Scotia (\$91).

While the percentages reporting expenditures on government-run lotteries in both provinces approximate the Canadian average (74%), the amounts spent, on average, are lower than the Canadian average (\$176)[Table 30]. On the other hand, both provinces have higher rates of participation in casinos and slot machines types of gambling than the Canadian average (17%). However, Nova Scotia falls below the national average of \$60 for expenditures on these games, while spending Saskatchewan is 25 percent above the national average. Both provinces also have higher percentages of households reporting bingo expenditures than the national average (12%), and Nova Scotians spend more on this game than the Canadian average. While not a focus of this report, we note that both Nova Scotia and Saskatchewan have higher participation



rates in non-governmental lottery and raffle tickets, compared to the national average.

#### **i) Income**

Income, we find, is positively associated with the likelihood of household gambling expenditures overall. This pattern holds for government-run lotteries and casinos and slot machines, but not for bingos. In Nova Scotia, for example, the percentage of households reporting expenditures on bingos reveals little difference by income groups, and, in fact, the percentage reporting is slightly lower (14%) for the highest income group compared to the lowest income group (16%). There are also some differences in the pattern of average expenditures. While gaming expenditures overall in Nova Scotia first increase and then decrease with income, spending on casinos and slot machines continue to rise with income, while spending on bingos declines dramatically at higher income levels. In Saskatchewan, the expenditures per household continue to rise with income for all types of games, as they do in Canada, except for bingos. The regressive pattern noted in Section 3 of the report for gambling in Nova Scotia seems to hold for each type of game of chance, except for casinos and slot machines. This regressive pattern is especially evident for bingos, which have the

highest average expenditures of any game of chance for the lowest income group.

## **ii) Age**

The age groupings available in the special runs are collapsed from those used in our earlier analysis. However, some preliminary conclusions can be reported. Overall, we find higher percentages of households in the middle age groups reporting gambling expenditures in each jurisdiction. This pattern holds for each type of game, in each jurisdiction, with the exception of bingos in Saskatchewan and Canada, where the percentage of households reporting bingo expenditures increases with age in the former and is constant in the latter. The decrease in participation among senior households in Nova Scotia, noted earlier, is also found in each type of game.

As noted earlier, age is also generally positively related to average household gambling expenditures up to 64 years, whereupon expenditures on gambling begin to decline. However, when we examine specific games of chance we discover an anomaly. For bingos only, average household gambling expenditures continue to increase as age increases (see the Atlantic results, Table 34). This does not hold true for other games of chance expenses. Average household expenditures for government-run pool and lottery tickets, casinos and slot machines and

non-government lottery and raffle tickets decline significantly when the age of the reference person is 65 years and over. There are no notable differences across the three jurisdictions in these results.

### **iii) Education**

We indicated earlier that, in general, a smaller percentage of households in the lowest and highest educational groups report gambling expenditures, as compared to those with a high school education (though the difference for the lowest group in Nova Scotia was less pronounced than in the other jurisdictions). This general pattern holds for government-run lotteries, but it is less clear for other games of chance. For example, the percentage reporting casino and slot machine expenditures in Nova Scotia is 33 percent for both high school and post-secondary educated households, and in Canada the rate actually is slightly higher for post-secondary educated households (18%) than those with high school diplomas (17%) and considerably higher than for those with less than high school education (14%). The percentage of households reporting bingo expenditures, on the other hand, is highest for those with less than high school education, in all three jurisdictions. Clearly, different types of games appeal to different educational groups. For example, in Nova Scotia, households with less than high school education are more likely to report bingo expenditures than casino or

slot machine expenditures, while those with post-secondary education are almost three times more likely to report expenditures on casino and slot machines than bingos.

Our earlier results stressed the high amount spent on gambling by lower educated households, especially in Nova Scotia. We note here that average expenditures on bingos are almost 4 times higher for those households with less than high school education than for those households with post-secondary education. For government lotteries, the average expenditures of the lowest educational group are 50 percent higher than the expenditures of the post secondary educated group. For casinos and slot machines, however, the relationship is reversed, with average expenditures increasing with educational level.

Higher average spending by lower educational groups is less evident in the other jurisdictions. In Saskatchewan, the only game where the lowest income groups spend the most on average is bingos, and this educational group spends considerably less than high school graduates on both government lotteries and casinos and slot machines. In Canada, the average household spending of those in the lowest educational group is similar to that of high school graduates. In general, post-secondary educated households spend less, the exception being bingos where the pattern is similar to that of Nova Scotia and Saskatchewan.

#### **iv) Geographic Area**

In our earlier analysis of geographic differences in gambling we were able to distinguish between larger urban areas, smaller urban areas, and rural areas. We found few geographical differences in Nova Scotia regarding the percentage of households reporting gambling expenditures. In Saskatchewan, on the other hand, we found that households in larger urban areas were more likely to report gambling expenditures than households in smaller communities or rural areas. Unfortunately, information on gambling by size of area of residence was unavailable for Canada in the microdata file and so we were unable to comment on national patterns.

In the special runs, we can access both provincial and national data. However, we can only distinguish between larger urban centres (>30,000) and all other areas. In Nova Scotia, the overall percentage of households reporting gambling expenditures is the same for larger and smaller population areas. However, we find lower percentages of reporting for government lotteries and slot machines in smaller areas as compared to urban centres. In fact, for casinos and slot machines the rate is even lower at half that reported for above smaller areas. Interestingly, for bingos there is little difference in the percentage of households reporting expenditures, by size of area of residence. In Saskatchewan, on

the other hand, the percentage of households reporting gambling expenditures is lower in smaller population areas for each of the three games of chance, including bingos, although the differences for casinos and slot machines are not as dramatic as they are in Nova Scotia. In Canada overall, the percentage of households reporting bingo expenditures is higher in smaller areas, while the opposite holds true for the other games of chance.

In terms of the average expenditures on gambling, higher amounts overall are spent in larger urban areas in each jurisdiction. This is especially true in Nova Scotia and Saskatchewan, although these differences are not significant in the regression analysis using the microdata file. In Nova Scotia, we find that the most dramatic difference is in the average amount spent on casino and slot machines (\$82 in larger centres and \$14 in smaller areas) This, we suspect, reflects the location of casinos and the distribution patterns of video lottery machines in the province. Average spending on bingos in Nova Scotia, on the other hand, is 35 percent higher in smaller areas. This expenditure pattern is the opposite of the one we find in Saskatchewan, where, on average, urban households spend significantly more on bingos than do rural households. For other games of chance, the expenditure pattern in Saskatchewan is similar to the pattern in Nova Scotia. The Canadian pattern is similar to

Nova Scotia, although the geographic differences in spending levels are not as pronounced.

#### **v) Household Composition**

The variables available on the special runs that relate to type of household are much more limited than those we use in the microdata analysis. For example, there is no data on the presence of spouses and the number of children. Thus, we can only provide rough comparisons. In general, we find that one person households are less likely to report gambling expenditures, for all games of chance and all jurisdictions. Similarly, in Nova Scotia, the average amount spent increases with the number of households members, except in the case of bingos, where two person households spend more on average than do households of 3 or more. In Saskatchewan, larger size households spend more on casinos and slot machines and bingos, but less on government lotteries. In Canada, the differences in spending between 2 person and 3 or more person households are very small when compared to Nova Scotia and Saskatchewan.

Looking at differences by number of full-time earners, we again find that the pattern for bingos in Nova Scotia is unusual, in that both the percentage of households reporting bingo expenditures, and the average amount spent on bingos decrease as the number of full-time earners

increase. The opposite is true of government lotteries in the province. And for casinos and slot machines, the percentage of households reporting expenditures increases as the number of earners increases, while the average expenditures decline with 3 or more earners. In Saskatchewan and Canada, average expenditures on casinos and slot machines and government lotteries increase with the number of full-time earners, while the reverse is true of bingos (although there is some missing data for Saskatchewan).

In general, households with no full-time earners are less likely to gamble and, on average, they spend less on gambling than households with full-time earners. While these households presumably have more time to gamble, they likely have less money to gamble. The only game of chance where this pattern consistently does not hold is bingo. Bingos have very high participation rates and levels of spending by households who do not have full-time earners. On the other hand, it is interesting to note for Nova Scotia the large percentage of households who gamble and have no full-time earners (78%), and who spend relatively large amounts on gambling (\$205).

#### **iv) Summary**

The data show considerable variation by type of game of chance, as predicted in the convenience model outlined earlier. The percentage



of households reporting bingo expenditures is relatively constant across income groups and geographic areas in Nova Scotia, but is higher for lower educated households. Lower educated households, older households, and households with no full-time earners spend more on bingos compared to other education, age and earning groups. Participation and spending on casinos and slot machines in Nova Scotia, on the other hand, increase with income and education, and are higher in urban areas. Participation and spending on government lotteries is high in Nova Scotia when compared to other games of chance, for most socio-economic groups. The percentage of senior households reporting expenditures on government lotteries, and the average amount spent, however, is significantly lower than the middle age group. Government lotteries also seem to appeal less to those with post-secondary education and to those living in smaller areas of Nova Scotia.

### **6.3 Changes in 1997**

We conclude this report with a brief examination of 1997 data, and we note significant changes from 1996 (Tables 31 to 33). The 1997 microdata file has not yet been released to the public. As noted above, changes to the survey and the sample size in 1997 make comparisons difficult and tentative. For Canada as a whole (Table 33), the 1997 data show a decline in the percentage of households reporting gambling

expenditures (from 81% to 77%) and a decline in average expenditures per household (from \$264 to \$247). While Nova Scotia (Table 31) shows a similar decline in percentage of households reporting gambling expenditures (from 83% to 70%), there is, however, a 9 percent increase in average expenditure per household (from \$231 to \$251). Thus, it would seem that those who gamble are doing so more intensely, and gambling revenues are derived from a smaller share of the population. As shown in Table 32, the percentage reporting gambling expenditures is steady in Saskatchewan (decline of 1%), while there is only a minor increase in average expenditure (\$256 to \$265).

In Nova Scotia, there is also a slight decline in the percentage of households in smaller areas reporting gambling, but there is an increase in the average amount spent. Looking at age, the biggest spending increases are in the middle age group. Looking at income, average spending by households in the two lower income groups is down, while average spending by households in the two higher income groups is up. This suggests that the level of regressivity of gambling as a "tax" may be declining.

In Saskatchewan, there is a shift from a higher percentage of households in urban areas reporting gambling expenditures to a higher percentage of those in smaller areas. In terms of income, the trend is

different from that found in Nova Scotia. Average spending on gambling by households in the two lower income groups and the top group has increased, while that of households in the \$35,000-\$49,999 group has decreased. In terms of age, there is some sign of increased average spending in the younger and middle groups, while the senior group shows a decline in participation and average spending.

For Canada overall, the decline in percentage of households reporting and in average levels of gambling expenditures seems to be fairly dispersed demographically. The patterns by age, income group and size of area of residence remain essentially the same as the patterns in 1996.

#### **i) Trends by Type of Game in Nova Scotia**

Looking at changes in Nova Scotia by type of game, we find that the percentage of households reporting expenditures on government lotteries is down significantly (from 73% to 66%), while the average expenditures per household show only a marginal decline (\$149 to \$147). The changes that relate to income groups for government lotteries follow the same pattern for overall gambling expenditures noted above. There is no change in the relationship between spending on government lotteries and age. Average spending on government lotteries

by households in smaller areas is in decline, while average spending by households in larger areas is increasing slightly.

The percentage of households reporting expenditures on casinos and slot machines in Nova Scotia held steady, while the average amount spent increased from \$50 to \$61. The percentage of households in the highest income group reporting expenditures on casinos and slot machines increased from 40 percent to 43 percent and their average spending almost doubled, from \$64 to \$115. Participation and average spending by households in the \$20,000-\$34,999 group declined, on the other hand. There is also some convergence in the percentage of households in larger and smaller areas reporting expenditures on casinos and slot machines (the rate decreased in the larger areas and increased in the smaller areas). Average spending on casino and slot machines by households in smaller areas more than tripled, from \$14 in 1996 to \$48 in 1997, while average spending by urban households declined from \$82 to \$72. This, we conclude, reflects the spread of video lottery gambling in the province, since casinos are absent in the smaller geographic areas.

Surprisingly, perhaps, the only gaming activity which shows growth in the percentage of households reporting expenditures in Nova Scotia is bingo (from 15% to 17%). Average spending also increased from \$91 to \$113. The growth seems to be concentrated in the smaller

areas, where the percentage of households reporting bingo expenditures increased from 15 percent to 18 percent.

## **ii) Trends by Type of Game in Saskatchewan**

For government lotteries, there is a decrease in both the percentage of households reporting and in the average expenditures in Saskatchewan. This pattern is similar to the declines in Nova Scotia. Average expenditure decreased for households in the highest and lowest income groups, while it increased in the middle groups. Looking at age, the decrease in lottery play is concentrated in the younger households. There is also a reduction in the percentage of households reporting spending on government lotteries, as well as a reduction in average spending in larger urban areas, while simultaneously participation and average spending by rural households has increased. The geographic differences (size of area of residence) seem to be disappearing.

Both participation and average expenditures on casinos and slot machines have increased in Saskatchewan. This change is more dramatic than in Nova Scotia. Average spending has increased from \$80 to \$149. The average spending is now almost two and half times that of Nova Scotia. This increase is distributed across all income groups. Only the younger households show an increase in the percentage reporting casino and slot machine expenditures (from 32% to 41%).

Average spending by this age group more than doubled, while the average spending of seniors almost doubled. Unfortunately, the data for seniors in Nova Scotia is unavailable, although we suspect a similar trend exists. In Saskatchewan, as in Nova Scotia, differences in participation and spending on casino and slot machines by size of area of residence decline in 1997, due to dramatic increases in average spending in the smaller areas (from \$59 to \$139).

The story is different for bingos, however, which show a decline in terms of participation and average spending in 1997 in Saskatchewan. This reflects large declines in larger urban areas (from 16% to 9%). Smaller areas now have a higher percentage of households participating in bingos than do larger areas, as in Nova Scotia. The age and income patterns do not appear to have changed.

### **iii) Trends by Type of Game in Canada**

The overall trend towards a lower percentage of households reporting gambling expenditures, and lower average spending levels holds for government lotteries and bingos, but not for casinos and slot machines. Government lotteries show the biggest decline. As predicted by the convenience model, traditional lotteries are under pressure from newer gambling products. The decline in participation is smallest among senior households. In terms of income, the largest decline is by

households in the highest income group. There appears to be a convergence in rates of participation and average expenditures between households in larger and smaller areas, as in Saskatchewan.

Unlike Nova Scotia, the percentage of households reporting expenditures on casinos and slot machines is up in Canada. Average expenditures also show an increase, except for the lowest income group. The age pattern remains unchanged, with all ages showing increases. Similarly, the pattern by size of area of residence is unchanged from 1996.

Bingos show a decline both in terms of participation and average expenditure per household. This decline, however, occurs most dramatically in the two higher income groups. With regard to age, the participation rates decline slightly where the age of the referent person is 18-44 and 45-64 and increases slightly in the elderly group. Average expenditures per household, however, decline for all age groups. With regard to size of area, bingos have experienced a decline in participation in larger communities, while the pattern remains similar for smaller districts. Average expenditures per household have declined in both larger and smaller areas.

#### iv) Summary

The comparison of spending patterns in 1996 and 1997 shows that average gambling expenditures continue to increase in Nova Scotia. Average spending on gambling in Nova Scotia in 1997 was actually higher than in Canada, despite lower incomes in Nova Scotia. This is a change from 1996. In Nova Scotia, though less so than in Canada overall, gambling expenditures are also derived from a decreasing percentage of the population. As in other jurisdictions, the increase in average spending is largely fueled by the growth of expenditures on casinos and slot machines (though the growth is notably weaker than in Saskatchewan). In addition, in Nova Scotia spending on bingos increased, unlike the other jurisdictions. Spending on government lotteries, on the other hand, went down in Nova Scotia, as elsewhere.

The growth in gambling expenditures in Nova Scotia comes mainly from increased spending by households in the higher income groups, which may be a welcome trend, given the evidence of the regressiveness of gambling as a tax. Unfortunately the 1997 data does not have information on education, so we are unable to examine whether the disturbingly high spending on gambling by lower educated households in Nova Scotia, noted earlier, is changing.



## BIBLIOGRAPHY

Baseline Market Research Ltd. (1996). Final Report 1996 Prevalence Study on Problem Gambling in Nova Scotia. Halifax: Nova Scotia Department of Health.

Campbell, Colin and Garry Smith (1998). "Canadian Gambling: Trends and Public Policy Issues." Annals American Academy of Political and Social Sciences, 556, March.

Clotfelter, C. T. and P.J. Cook (1989). Selling Hope: State Lotteries in America. Cambridge, MA.: Harvard University Press.

Eadington, William R. (1994). Understanding Gambling. Ninth International Conference on Gambling and Risk Taking. Las Vegas, Nevada.

Eadington, William R. (1995a). "Economic Development and the Introduction of Casinos: Myths and Realities." Economic Development Review 13 (4, Fall) 51- 54.

Eadington, William, R. (1995b) The Emergence of Casino Gambling as a Major Factor in Tourism Markets. Change in Tourism: People, Places, Processes. R. Butler and D. Pearce. New York, NY, Routledge: 159-186.

Eadington, William R. (1986). "Ethical and Policy Considerations in the Spread of Commercial Gambling." Ed. J. McMillan Gambling Cultures. New York, Routledge: 243-262.

Goodman, Robert. (1995a). "Legalized Gambling: Public Policy and Economic Development Issues." Economic Development Review 13 (4, Fall): 55-57.

Goodman, Robert. (1995b). The Luck Business: The Devastating Consequences and Broken Promises of America's Gambling Explosion. New York: Free Press.

Grant, Scott (1998). "Atlantic Lottery Corporation 1998 Market Overview"(Calendar Quarters 1 and 2), Moncton: Market Research and Development, ALC.

Grinols, Earl I. (1995). "Gambling as Economic Policy: Enumerating Why Losses Exceed Gains." Illinois Business Review 52 (1, Spring): 6-11.

Grinols and Omorov (1996). "Who Loses When Casinos Win?" Illinois Business Review 53 (1, Spring): 7-11.

LaFramboise, Donna (1998). "Long-Armed Bandits". Globe and Mail, Eastern Edition, Halifax, Nova Scotia: D1-D2.

Little, Don and Renee Beland (1998). "'Can I Help You?': The Rise in Household Spending on Services." , Services Indicators 2nd Quarter. Ottawa: Statistics Canada.

Marfels, Christian (1997). "Casino Gaming and VLT Gaming: Substitution Effect or Supplementation Effect?" Gaming Law Review 1(3):333-339.

Marshall, Katherine (1996a). "A Sure Bet Industry." Perspectives, Ottawa: Statistics Canada Catalogue No. 75-001-XPE (Autumn): 37-41.

Marshall, Katherine (1996b). "Games of Chance." Family Expenditure in Canada, Ottawa: Statistics Canada Catalogue No. 62-555-XPB (July):32-39.

Marshall, Katherine (1998). "The Gambling Industry: Raising the Stakes." Perspectives, Ottawa: Statistics Canada Catalogue No. 75-001-XPE (Winter): 7-11.

Nova Scotia Alcohol and Gaming Authority (1996-97). Annual Gaming Report. Dartmouth, Nova Scotia.

Nova Scotia Alcohol and Gaming Authority (1997-98). Annual Gaming Report Vol. I and Annual Gaming Report Appendices Vol. II, Dartmouth, Nova Scotia.

Nova Scotia Department of Health, Drug Dependency Services (1998). Nova Scotia Video Lottery Players Survey 1997-1998, Halifax, Nova Scotia.

Nova Scotia Gaming Control Commission (1995-96). A Year in Review: Gaming in Nova Scotia. Dartmouth, Nova Scotia.

Omnifacts Research Ltd. (1996). "A Study of Gambling in Nova Scotia: General Population Survey." Pub. in A Year in Review Gaming in Nova Scotia, Halifax: Nova Scotia Gaming Control Commission.

Porter Dillon (1999) Socioeconomic Impact of Video Lottery Terminals: Final Report. Prepared for the Legislative Assembly of Nova Scotia, Halifax, Nova Scotia.

Seelig, Michael Y. and Julie H. Seelig (1998). "Place Your Bets! On Gambling, Government and Society." Canadian Public Policy XXIV (1): 91-106.

Shaffer, H. J., M. N. Hall and J. V. Bilt (1997). Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-Analysis. Boston, Mass.: Harvard Medical School, Division on Addictions.

Smith, Garry J. and Jason Azmier (1997). Gambling and the Public Interest? Calgary, Alberta, Canada West Foundation.

Smith, Garry J. and T. D. Hinch (1996) "Canadian Casinos as Tourist Attractions: Chasing the Pot of Gold." Journal of Travel Research 34 (3, Winter): 37-45.

Statistics Canada (1998). 1996 Survey of Family Expenditures. Ottawa: Income Statistics Division, Catalogue No. 62M0001XCB.

Statistics Canada (1991). The Canadian Labour Force Survey, 1984-1990. Ottawa: Statistics Canada Catalogue No. 71-526.

Thompson, William N. (1997) "Not Exactly! The Grocery Store: Casino and Slot Joints as Tourist Destination Resorts: Some Observations on Dysfunctional Gaming Establishments in Nevada and South Carolina." Conference on the Social and Economic Impacts of Electronic Gambling, Edmonton, Alberta.

Thompson, William N. and Ricardo Gazel (1997). "The Last Resort Revisited: The Spread of Casino Gambling as a Prisoner's Dilemma." Gambling: Public Policies and the Social Sciences. W. R. Eadington and J. A. Cornelius, Reno, Nevada, Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada, Reno.

Walker, M. B. (1996). "The Prevalence of Problem and Pathological Gambling: A Critical Analysis." Journal of Gambling Studies 12:2 (Summer):233-249.

Vaillancourt, Francois (1999) "Government Gambling Revenues, 1985-1995/1996: Evidence From Canada, Great Britain and Australia", revised paper, presented at the 1998 Conference of the National Tax Association, Austin Texas.

Wynne, H. J., G. Smith and R. Volberg (1994). Gambling and Problem Gambling in Alberta. Edmonton: Alberta Lotteries and Gaming Commission.

Wynne Resources (1998). Adult Gambling and Problem Gambling in Alberta. Edmonton: Alberta Alcohol and Drug Abuse Commission.

## **LIST OF TABLES**

### **Section 3.1 Who Gambles?**

**Table 1** Percentage of Households Reporting Expenditures on Games of Chance, NS, Saskatchewan and Canada

**Table 2** Household Expenditures on Games of Chance - Canada and the Provinces

**Table 3-1,2,3** Profiles of Households by Extent of Expenditures on Games of Chance - Nova Scotia, Saskatchewan, Canada

**Table 4** Probit Regressions - Probability of Reporting Gambling Expenditures

### **Section 3.2 Intensity of Gambling, if gamble**

**Table 5** Profiles of Households by Gambling Expenditure Quintiles

**Table 6** Table 6-1,2,3 Profiles of Households in Low, Medium and High Gambling Groups

**Table 7** Average Expenditures per Household on Games of Chance

**Table 8** OLS Regressions- Level of Gambling Expenditures

**Table 9** Average Gambling Expenditures as a Percentage of Total Household Income

**Table 10** OLS Regressions - Gambling Expenditures as a Proportion of Total Household Income

**Table 11** Percentage of Households Who are in the Top Gambling Expenditure Quintile

**Table 12** Probit Regressions - Probability of Being in the Top Gambling Expenditure Quintile

**Table 13** Percentage of Households Who are in the High Gambling Group (Top 25%, Gambling Expenditures as a Proportion of Income)

**Table 14** Probit Regressions - Probability of Being in the High Gambling Group (Top 25%, Gambling Expenditures as a Proportion of Income)

#### **Section 4 Gambling and Financial Well-Being**

**Table 15** Expenditures on Necessities and Indicators of Financial Well-Being, NS, Saskatchewan and Canada

**Table 16** OLS Regressions - Household Expenditures on Food for Home

**Table 17** OLS Regressions - Household Expenditures on Principal Accommodation

**Table 18** OLS Regressions - Net Change in Assets minus Liabilities

**Table 19** OLS Regressions - Change in RRSP Balances

**Table 20** OLS Regressions- Total Household Income minus Expenditures

#### **Section 5 Gambling and Other Discretionary and Leisure Spending**

**Table 21** Expenditures on Leisure/Entertainment Activities, and Charities, NS, Saskatchewan and Canada

**Table 22** OLS Regressions-Household Expenditures on Home Entertainment

**Table 23** OLS Regressions- Household Expenditures on Total Recreation

**Table 24** OLS Regressions- Household Expenditures on Recreational Services

**Table 25** OLS Regressions- Household Expenditures on Alcohol from Licensed Establishments

**Table 26** OLS Regressions- Household Expenditures on Food From Restaurants

**Table 27 OLS Regressions- Household Expenditures on Charitable Donations**

## **LIST OF CHARTS**

### **Section 3 Profiles of Gambling Households**

**Chart 1** Percentage of Households Reporting Expenditures on Games of Chance by Income Group in Nova Scotia, Saskatchewan and Canada

**Chart 2** Average Gambling Expenditures as a Proportion of Total Household Income by Income Group in Nova Scotia, Saskatchewan and Canada

**Chart 3** Average Expenditures per Household on Games of Chance by Income Group in Nova Scotia, Saskatchewan and Canada

## NOTES FOR TABLES

**Tables 4, 8, 10, 12, 14, 16, 17, 18, 19, 20, 22, 23, 23, 25, 26, 27:**

In these regressions many of the variables are dummy variables. The base cases for all sets of dummy variables are as follows:

Age: respondent age 35-44

Education: respondent has high school education

No spouse: spouse in household

Province: Ontario

Work patterns (couples): other (at least one non-employed or not employed full-year)

EI: No EI income received

Social Assistance: no social assistance income received

Main income source: most income from wages and salaries

Presence of children: no children in household

Geographic area: resides in small urban area (< 30,000)

Gov't casino present: no casinos in province

VLTs present: no VLTs in province

Low, medium, high gambling groups: no gambling expenditures in household

Household gambles: no gambling expenditures by household

No change in RRSP: RRSP balance has changed

No net change in assets minus liabilities: change in assets minus liabilities



**Table 1-Percentage of Households Reporting Expenditures on Games of Chance -  
Nova Scotia, Saskatchewan and Canada\***

	% N.S.	% Sask.	% Can.
<b>All Households</b>	83	82	81
<b>Before Tax Income</b>			
\$0-\$20,000	70	70	66
\$20,000 - \$39,999	83	82	82
\$40,000 - \$59,999	87	85	87
\$60,000 - \$79,999	86	93	87
\$80,000 and over	92	93	87
<b>Age of reference person</b>			
<25	69	80	71
25-34	87	81	83
35-44	87	86	83
45-54	86	87	87
55-64	84	87	85
65 and over	71	73	72
<b>Education of reference person</b>	<i>not sig</i>		
Less than 9 years	76	71	76
Some/complete high school	83	86	84
Post secondary certificate or degree	85	84	84
University certificate or diploma	81	77	75
Not stated	100	100	89
<b>Household type</b>			
One person	65	72	71
Married couple only	86	87	84
Married couple with single children	89	88	86
Married couple with relatives/others	88	93	90
Lone parent families	83	79	74
Other households with relatives only	83	74	84
Other households unrelated people	87	84	87
<b>Presence of children</b>	<i>not sig</i>		
No children	81	80	81
One child	88	83	82
Two or more children	83	89	84
<b>Presence of spouse</b>			
No spouse	73	75	74
Spouse	88	88	86
<b>Work patterns, couples only</b>	<i>not sig</i>	<i>not sig</i>	
Both work full time-full year	92	90	88
One full time-full year, one part time full year	86	91	85
Other	86	86	84

**Table 1- (continued)**  
**Percentage of Households Reporting Expenditures on Games of Chance -**  
**Nova Scotia, Saskatchewan and Canada\***

	% N.S.	% Sask.	% Can.
<b>Main source of income</b>			
Wages and salaries	88	87	86
Self employment	79 ( <i>not sig</i> )	84 ( <i>not sig</i> )	78
Investments	50	66	66
Government transfers	73	72	71
Other sources	86 ( <i>not sig</i> )	84	82 ( <i>not sig</i> )
<b>Employment insurance income</b>		<i>not sig</i>	
Recipient households	90	86	88
Non-recipient household	80	82	80
<b>Social assistance income</b>	<i>sig at 90%</i>		
Recipient households	76	70	72
Non-recipient household	83	84	83
<b>Low-income cut-off</b>			
Households below low-income cut-off	71	70	67
Households above low-income cut-off	85	85	85
<b>Size of area of residence</b>	<i>sig at 90%</i>		
30,000 and over	84	84	
less than 30,000	75	77	
Rural	84	77	
n=	821	898	6,458

\*Unless otherwise indicated, differences in percentages are significant with at least a 95% level of confidence.

**Table 2 - Household Expenditures on Games of Chance - Canada and the Provinces**

	% reporting gaming expenditures*	Average gaming expenditures per household**	Gaming as % of household income**
	%	\$	%
<b>Canada</b>	81	317	.89
<b>Provinces</b>			
Newfoundland	81	349 (26.89)	1.1 (.12)
Prince Edward Island	75	308 (37.64)	.9 (.14)
Nova Scotia	83	267 (19.75)	.9 (.14)
New Brunswick	76	333 (32.45)	1.1 (.10)
Quebec	86	283 (16.47)	1.0 (.15)
Ontario	79	333 (18.34)	.8 (.05)
Manitoba	80	372 (36.39)	1.1 (.12)
Saskatchewan	82	287 (19.97)	.8 (.06)
Alberta	83	363 (33.54)	.9 (.09)
British Columbia	80	284 (18.05)	.8 (.06)
<b>Casinos</b>			
Provinces with casinos	82	311.3 ( 9.88)	.90 (.05)
Provinces without casinos	81	319.9 (13.09)	.86 (.04)
<b>VLTs</b>			
Provinces with VLTs	84	307.5 (9.37)	.99 (.06)
Provinces without VLTs	79	320.0 (13.64)	.78 (.04)

\* Differences in percentages are significant with at least a 95% level confidence.

\*\* For households with expenditures on games of chance.  
Standard errors are in brackets.

**Table 3-1 - Profiles of Households by Extent of Expenditures on Games of Chance -  
Nova Scotia**

	All households	Non-gambling households	All gambling households	Top quintile of gambling households
Distribution of Households	%	%	%	%
<b>Before Tax Income</b>				
\$0-\$20,000	23	39	19	11
\$20,000 - \$39,999	28	27	29	29
\$40,000 - \$59,999	24	19	26	34
\$60,000 - \$79,999	13	10	13	12
\$80,000 and over	12	5	14	13
<b>Age of reference person</b>				
<25	2.9	5.3	2.5	2.2
25-34	15.6	11.7	16.4	9.7
35-44	25.9	18.9	27.5	26.2
45-54	20.6	16.7	21.4	28.1
55-64	13.7	12.6	13.9	14.9
65 and over	21.3	34.8	18.4	18.9
<b>Education of ref. person</b>				
Less than 9 years	11	16	10	21
Some/complete high school	50	48	51	51
Post secondary cert. or degree	25	22	26	20
University cert. or diploma	13	14	13	8
<b>Size of area of residence</b>				
30,000 and over	55	52	56	69
less than 30,000	14	20	13	9
Rural	31	28	32	22
<b>Means</b>				
Average age of ref. person	49	53	48	50
Average household income	\$44,523	\$33,119	\$46,932	\$50,011

**Table 3-2 - Profiles of Households by Extent of Expenditures on Games of Chance - Saskatchewan**

	All households	Non-gambling households	All gambling households	Top quintile of gambling households
Distribution of Households	%	%	%	%
<b>Before Tax Income</b>				
\$0-\$20,000	24	40	20	9
\$20,000 - \$39,999	30	30	30	26
\$40,000 - \$59,999	22	19	23	27
\$60,000 - \$79,999	11	5	13	16
\$80,000 and over	13	5	14	21
<b>Age of reference person</b>				
<25	4.2	4.7	4.1	0
25-34	19.1	20.3	18.8	12
35-44	26.1	21.3	27.2	26
45-54	16.5	12.1	17.5	21
55-64	13.1	9.8	13.8	22
65 and over	21.0	31.7	18.7	19
<b>Education of ref. person</b>				
Less than 9 years	13	21	11	12
Some/complete high school	46	37	48	60
Post secondary cert. or degree	28	25	29	20
University cert. or diploma	12	16	12	7
<b>Size of area of residence</b>				
30,000 and over	73	65	75	77
less than 30,000	13	17	12	10
Rural	14	18	13	11
<b>Means</b>				
Average age of ref. person	48	51	48	50
Average household income	\$44,131	\$32,006	\$46,722	\$56,429

**Table 3-3 - Profiles of Households by Extent of Expenditures on Games of Chance - Canada**

	All households	Non-gambling households	All gambling households	Top quintile of gambling households
Distribution of Households	%	%	%	%
<b>Before Tax Income</b>				
\$0-\$20,000	20	36	16	10
\$20,000 - \$39,999	27	26	27	25
\$40,000 - \$59,999	22	16	23	25
\$60,000 - \$79,999	15	11	17	19
\$80,000 and over	17	12	18	22
<b>Age of reference person</b>				
<25	3.4	5.2	3.0	1.1
25-34	18.9	16.9	19.4	14.2
35-44	26.0	24.2	26.4	23.1
45-54	19.6	14.0	20.9	23.8
55-64	12.5	9.9	13.1	17.1
65 and over	19.6	29.8	17.3	20.8
<b>Education of ref. person</b>				
Less than 9 years	13	16	12	15
Some/complete high school	48	42	49	57
Post secondary cert. or degree	24	21	25	19
University cert. or diploma	15	21	14	8
<b>Means</b>				
Average age of ref. person	48	51	47	50
Average household income	\$51,741	\$43,059	\$53,723	\$60,948

**Table 4 – Probit Regressions - Probability of Reporting Gambling Expenditures**

Variable	NS	SASK	CANI	CAN2
Intercept	.517 (.341)	.763** (.325)	.776* (.085)	.776* (.086)
Total HH income before tax	8.162E-6* (3.115E-6)	.7.629E-6* (2.874E-6)	3.388E-6* (6.512E-7)	3.406E-6* (6.497E-7)
Respondent age 15-24	-.355 (.315)	.101 (.274)	-.292* (.083)	-.299* (.083)
Respondent age 25-34	.116 (.191)	-.118 (.166)	.930 (.047)	.089*** (.047)
Respondent age 45-54	-.266 (.185)	.254 (.182)	.123** (.051)	.119** (.051)
Respondent age 55-64	-.300 (.223)	.389*** (.215)	.141** (.062)	.133** (.062)
Respondent age 65+	-.501** (.231)	.111 (.228)	-.139** (.064)	-.153** (.064)
Respondent < 9 yrs educ	-.142 (.172)	-.280*** (.165)	-.133* (.049)	-.127* (.049)
Respondent cert or diploma	-.114 (.145)	-.150 (.132)	-.132* (.040)	-.131* (.040)
Respondent university educ	-.515* (.192)	-.727* (.174)	-.555* (.046)	-.554* (.046)
No spouse in HH	-.100 (.161)	-.200 (.157)	-.158* (.044)	-.163* (.044)
Respondent & spouse work FTFY	.567** (.248)	-.062 (.211)	.099 (.061)	.100 (.061)
Respondent & spouse work combination FTFY-PTFY	-.362 (.226)	.080 (.207)	-.092 (.060)	-.096 (.060)
# adults 15+	.188** (.095)	-.051 (.085)	.091* (.025)	.083* (.024)
EI recipient	.293*** (.163)	.014 (.173)	.132* (.048)	.133* (.048)
Social assistance recipient	.010 (.213)	-.228 (.189)	-.177* (.054)	-.169* (.054)
Most income from self-emp	-.458** (.206)	-.126 (.199)	-.305* (.063)	-.308* (.063)
Most income from investments	-.729 (.448)	-.635** (.300)	-.437* (.098)	-.431* (.098)
Most income from gov't transfers	.024 (.203)	-.186 (.197)	-.257* (.056)	-.254* (.056)
Most income from other sources	.290 (.243)	-.057 (.253)	-.013 (.070)	-.010 (.069)

**Table 4 (continued) –  
Probit Regressions - Probability of Reporting Gambling Expenditures**

Variable	NS	SASK	CAN1	CAN2
One child in house	-.087 (.199)	.025 (.171)	-.095** (.049)	-.102 (.049)
Two or more children in house	-.444** (.190)	.397** (.176)	-.079 (.049)	-.089 (.049)
Resides in urban area > 30,000	.097 (.157)	.266*** (.156)		
Resides in rural area	.239 (.173)	-.033 (.197)		
Resides NFLD			.102 (.117)	
Resides PEI			-.094 (.212)	
Resides NS			.165** (.090)	
Resides NB			-.087 (.094)	
Resides QUE			.339* (.040)	
Resides MAN			.099 (.079)	
Resides SASK			.198** (.087)	
Resides ALB			.127** (.057)	
Resides BC			.078 (.048)	
Gov't casinos present				.060*** (.034)
VLT's present				.203* (.031)

Notes: All variables except household income before tax and # adults are dummy variables.  
Standard errors are in brackets.

Significance levels

- \* significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence



**Table 5 - Profiles of Households by Gambling Expenditure Quintiles\***

	overall	1	2	3	4	5
<b>Nova Scotia</b>						
Mean gambling \$	\$267	\$7	\$41	\$110	\$245	\$932
Median gambling \$	\$109					
Maximum gambling \$	\$6,548	\$20	\$65	\$156	\$352	\$6,548
Mean income	\$44,523	\$38,024	\$46,437	\$50,159	\$50,004	\$50,011
% of the total gambling expenditure	100%	.5%	.3%	.8%	.18%	.70%
Mean gambling \$/income	.9	.03%	.15%	.34%	.74%	3.3%
Median gambling \$/income	.3					
<b>Saskatchewan</b>						
Mean gambling \$	\$287	\$8	\$47	\$120	\$267	\$989
Median gambling \$	\$120					
Maximum gambling \$	\$5,970	\$20	\$77	\$170	\$400	\$5,970
Mean income	\$44,131	\$33,808	\$45,308	\$50,200	\$47,811	\$56,429
% of the total gambling expenditure	100%	.6%	3.3%	8.4%	18.6%	69%
Mean gambling \$/income	.8%	.05%	.18%	.40%	.83%	2.5%
Median gambling \$/income	.3					
<b>Canada</b>						
Mean gambling \$	\$317	\$11	\$52	\$123	\$281	\$1112
Median gambling \$	\$120					
Maximum gambling \$	\$15,520	\$25	\$85	\$190	\$418	\$15,520
Mean income	\$51,741	\$45,123	\$51,376	\$53,893	\$57,272	\$60,948
% of the total gambling expenditure	100%	.7%	3.3%	8.1%	17.7%	70%
Mean gambling \$/income	.9%	.04%	.17%	.42%	.89%	2.9%
Median gambling \$/income	.3					

\* For households with gambling expenditures

**Table 6-1 - Profiles of Households in Low, Medium and High Gambling Groups-  
Nova Scotia\***

	All households	Low	Medium	High
Distribution of households	%	%	%	%
<b>Before Tax Income</b>				
\$0-\$20,000	19	11	19	27
\$20,000 - \$39,999	29	28	26	36
\$40,000 - \$59,999	26	27	25	25
\$60,000 - \$79,999	13	15	16	7
\$80,000 and over	14	19	15	6
<b>Age of reference person</b>				
<25	3	2	2	4
25-34	16	20	17	11
35-44	28	28	30	21
45-54	21	20	22	23
55-64	14	13	14	15
65 and over	18	17	15	27
<b>Education of ref. person</b>				
Less than 9 years	10	4	7	24
Some/complete high school	51	45	52	54
Post secondary cert. or degree	26	30	27	18
University cert. or diploma	13	20	14	4
<b>Size of area of residence</b>				
30,000 and over	55	48	56	61
less than 30,000	14	14	12	12
Rural	31	38	31	27
<b>Means</b>				
Mean Gambling\$	\$267	\$15	\$141	\$773
Gambling\$/income (%)	.9	.02	.32	2.98
Average age	49	47	47	52
Average household income	\$44,523	\$54,558	\$48,187	\$36,788

\* For Households with gambling expenditures.

All differences in percentages are significant at the 95% level except size of area of residence  
The low group is the bottom 25% of households in terms of gambling expenditures as a proportion of total household income.

The high group is the top 25% of households in terms of gambling expenditures as a proportion of total household income.

**Table 6-2 - Profiles of Households in Low, Medium and High Gambling Groups-  
Saskatchewan\***

	All households	Low	Medium	High
Distribution of households	%	%	%	%
<b>Before Tax Income</b>				
\$0-\$20,000	20	23	15	28
\$20,000 - \$39,999	30	28	29	35
\$40,000 - \$59,999	23	17	26	22
\$60,000 - \$79,999	13	11	15	9
\$80,000 and over	15	21	16	6
<b>Age of reference person</b>				
<25	4	5	3	5
25-34	19	22	21	13
35-44	27	27	31	20
45-54	18	19	17	16
55-64	14	8	14	19
65 and over	19	18	15	28
<b>Education of ref. person</b>				
Less than 9 years	11	9	9	19
Some/complete high school	48	38	48	57
Post secondary cert. or degree	29	33	31	19
University cert. or diploma	12	20	11	4
<b>Size of area of residence</b>				
30,000 and over	73	74	77	72
less than 30,000	13	12	12	11
Rural	14	13	12	17
<b>Means</b>				
Mean Gambling\$	\$287	\$19	\$171	\$791
Gambling\$/income (%)	.8	.04	.34	2.49
Average age	48	47	46	51
Average household income	\$44,131	\$50,730	\$50,003	\$36,025

\* For Households with gambling expenditures.

All differences in percentages are significant at the 95% level except size of area of residence  
The low group is the bottom 25% of households in terms of gambling expenditures as a proportion of total household income.

The high group is the top 25% of households in terms of gambling expenditures as a proportion of total household income.

Table 6-3 - Profiles of Households in Low, Medium and High Gambling Groups- Canada*				
	All households	Low	Medium	High
Distribution of households	%	%	%	%
<b>Before Tax Income</b>				
\$0-\$20,000	16	11	13	26
\$20,000 - \$39,999	27	23	25	34
\$40,000 - \$59,999	23	21	25	21
\$60,000 - \$79,999	17	19	18	11
\$80,000 and over	18	27	18	7
<b>Age of reference person</b>				
<25	3	4	3	2
25-34	19	24	20	13
35-44	26	30	28	20
45-54	21	21	22	19
55-64	13	10	12	19
65 and over	17	12	15	27
<b>Education of ref. person</b>				
Less than 9 years	12	7	10	21
Some/complete high school	49	38	49	58
Post secondary cert. or degree	25	31	27	16
University cert. or diploma	14	24	14	5
<b>Means</b>				
Mean Gambling\$	\$317	\$23	\$176	\$893
Gambling\$/income (%)	.89	.04	.33	2.83
Average age	48	45	46	52
Average household income	\$51,741	\$65,130	\$55,231	\$39,295

\* For Households with gambling expenditures.

All differences in percentages are significant at the 95% level except size of area of residence  
The low group is the bottom 25% of households in terms of gambling expenditures as a proportion of total household income.

The high group is the top 25% of households in terms of gambling expenditures as a proportion of total household income.

**Table 7- Average Expenditures per Household on Games of Chance\***

	Nova Scotia		Saskatchewan		Canada	
	Mean	S.E.**	Mean	S.E.	Mean	S.E.
<b>Overall</b>	<b>\$267</b>		<b>\$287</b>		<b>\$317</b>	
<b>Before Tax Income</b>						
\$0-\$20,000	183	41.77	156	28.23	229	19.29
\$20,000 - \$39,999	290	44.98	289	40.41	280	13.70
\$40,000 - \$59,999	300	36.36	334	46.90	328	15.09
\$60,000 - \$79,999	264	45.91	318	37.86	377	22.39
\$80,000 and over	278	42.90	363	61.07	380	19.09
<b>Age of reference person</b>						
<25	273	135.94	109	22.05	191	36.25
25-34	160	21.06	210	35.14	215	10.63
35-44	236	29.01	247	22.65	292	15.02
45-54	326	47.81	332	60.52	345	15.61
55-64	374	85.15	426	69.01	431	28.47
65 and over	260	38.68	317	55.53	371	21.83
<b>Education of ref. person</b>						
Less than 9 years	441	69.35	342	78.95	425	34.65
Some/complete high school	285	31.60	323	26.95	362	11.67
Post secondary cert. or degree	209	26.15	259	41.88	242	10.53
University cert. or diploma	178	38.83	151	21.82	201	12.34
Not stated	50	0	352	77.89	160	44.32
<b>Household type</b>						
One person	131	23.58	206	26.78	256	18.09
Married couple only	352	51.26	310	34.37	360	14.23
Married couple with single children	270	29.29	286	36.00	306	11.90
Married couple with relatives/others	538	129.77	665	183.27	494	43.81
Lone parent families	127	22.60	184	44.05	184	16.69
Other HHs with relatives only	315	101.42	466	132.26	362	38.26
Other households unrelated people	176	66.52	124	24.24	402	76.76
<b>Presence of children</b>						
No children	283	25.05	321	28.75	347	10.42
One child	288	62.77	252	47.77	274	15.53
Two or more children	190	21.57	215	22.00	239	13.49
<b>Presence of spouse</b>						
No spouse	156	19.75	218	23.19	268	14.18
Spouse	319	27.05	326	28.35	343	9.21
<b>Work patterns, couples only</b>						
Both work FTFY	268	23.34	272	25.16	338	14.07
One FTFY, one PTFY	408	33.43	273	55.55	374	36.24
Other	255	129.81	294	28.15	302	9.58

**Table 7- (continued) Average Expenditures per Household on Games of Chance\***

	Nova Scotia		Saskatchewan		Canada	
	Mean	S.E.	Mean	S.E.	Mean	S.E.
<b>Main source of income</b>						
Wages and salaries	273	25.90	289	25.07	313	9.00
Self employment	355	63.13	339	57.00	343	31.90
Investments	91	48.19	159	51.26	445	135.95
Government transfers	256	46.42	224	33.67	301	17.11
Other sources	208	35.98	449	142.95	342	28.20
<b>Employment insurance income</b>						
Recipient households	265	33.63	320	51.78	325	15.65
Non-recipient household	268	23.70	282	21.68	315	8.82
<b>Social assistance income</b>						
Recipient households	150	49.08	303	104.03	239	19.19
Non-recipient household	280	21.11	285	19.00	326	8.39
<b>Low-income cut-off</b>						
HHs below low-income cut-off	178	47.94	153	24.85	219	18.61
HHs above low-income cut-off	283	21.53	314	23.38	335	8.53
<b>Size of area of residence</b>						
30,000 and over	307	25.84	296	23.64		
less than 30,000	238	79.50	242	45.34		
Rural	210	27.98	275	56.93		

\* For households with gambling expenditures

\*\* S.E.= Standard Error

**Table 8 - OLS Regressions - Level of Gambling Expenditures**

	NS	SASK	CAN1	CAN2
<b>Variable</b>				
Intercept	261.991** (120.118)	-50.192 (135.883)	111.205** (47.149)	111.640** (48.058)
Total HH income before tax	-.001 (.002)	.006** (.003)	.005* (.001)	.005* (.001)
Total HH income before tax(squared)	5.947E-9 (.000)	-2.017E-8 (.000)	-1.665E-8* (.000)	-1.694E-8* (.000)
Respondent age 15-24	115.915 (131.567)	-78.184 (109.558)	-46.538 (50.263)	-41.217 (50.245)
Respondent age 25-34	-51.339 (61.905)	15.731 (61.491)	-31.012 (23.677)	-27.491 (23.663)
Respondent age 45-54	66.606 (59.583)	61.599 (65.090)	10.174 (24.686)	11.584 (24.684)
Respondent age 55-64	160.096** (76.742)	179.797** (77.773)	112.913* (30.798)	116.415* (30.785)
Respondent age 65+	61.150 (83.308)	256.372* (94.639)	67.773*** (34.840)	72.102** (34.793)
Respondent < 9 yrs educ	161.497** (67.412)	-31.231 (71.898)	67.166** (27.062)	64.603** (27.014)
Respondent cert or diploma	-94.747*** (48.491)	-66.402 (47.913)	-140.966* (19.590)	-140.964* (19.590)
Respondent university educ	-121.171*** (66.758)	-269.634* (69.008)	-225.248* (25.172)	-224.089* (25.171)
No spouse in HH	-145.698* (55.928)	-43.401 (60.728)	16.469 (22.805)	18.387 (22.803)
Respondent & spouse work FTFY	-130.841*** (74.080)	-82.748 (70.065)	-27.079 (28.229)	-29.056 (28.228)
Respondent & spouse work combination FTFY-PTFY	86.851 (70.702)	-21.351 (68.532)	33.327 (27.689)	35.002 (27.690)
# adults 15+	63.353** (28.469)	56.290*** (32.767)	32.140* (11.633)	34.193* (11.601)
EI recipient	-81.720 (50.872)	14.774 (61.823)	22.444 (22.419)	18.659 (22.328)
Social assistance recipient	-56.037 (81.100)	244.941* (85.282)	-33.985 (30.314)	-35.829 (30.309)
Most income from self-emp	87.627 (74.692)	65.972 (75.823)	23.783 (34.336)	23.585 (34.319)
Most income from investments	-162.814 (232.260)	-262.369*** (137.245)	100.823*** (60.808)	99.879 (60.815)
Most income from gov't transfers	-55.073 (76.814)	-162.985*** (86.150)	10.148 (31.736)	7.695 (31.675)
Most income from other sources	-173.414** (81.405)	25.889 (93.903)	-20.807 (35.365)	-23.414 (35.327)

**Table 8 - (continued)**  
**OLS Regressions - Level of Gambling Expenditures**

	NS	SASK	CAN1	CAN2
<b>Variable</b>				
One child in house	6.726 (62.013)	-62.108 (64.652)	-50.408** (24.507)	-48.729** (24.507)
Two or more children in house	-36.926 (63.522)	-76.817 (61.934)	-79.994* (24.526)	-76.708* (24.499)
Resides in urban area > 30,000	45.780 (61.367)	83.454 (62.494)		
Resides in rural area	-89.741 (65.684)	25.949 (81.836)		
Resides NFLD			47.752 (60.514)	
Resides PEI			6.050 (122.478)	
Resides NS			-44.404 (45.911)	
Resides NB			21.066 (52.992)	
Resides QUE			-31.193 (20.070)	
Resides MAN			56.453 (41.738)	
Resides SASK			-14.581 (44.570)	
Resides ALB			60.416** (29.048)	
Resides BC			-26.494 (25.395)	
Gov't casinos present				-23.901 (17.748)
VLT's present				4.979 (15.821)

Notes: For households with gambling expenditures.

All variables except household income and # adults are dummy variables.

Standard errors are in brackets.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence



**Table 9- Average Gambling Expenditures as a Percentage of Total Household Income\***

	Nova Scotia		Saskatchewan		Canada	
	Mean%	S.E.	Mean%	S.E.	Mean%	S.E.
<b>Overall</b>	.9		.8		.9	
<b>Before Tax Income</b>						
\$0-\$20,000	1.9	.68	1.2	.18	2.0	.21
\$20,000 - \$39,999	1.0	.16	1.0	.14	1.0	.05
\$40,000 - \$59,999	.6	.08	.7	.09	.7	.03
\$60,000 - \$79,999	.4	.07	.5	.06	.6	.03
\$80,000 and over	.3	.04	.4	.07	.4	.02
<b>Age of reference person</b>						
<25	1.0	.32	.6	.14	.6	.08
25-34	.4	.06	.5	.09	.6	.03
35-44	.5	.07	.5	.06	.6	.03
45-54	1.4	.59	.8	.16	.8	.09
55-64	1.1	.29	1.2	.21	1.4	.21
65 and over	1.2	.19	1.2	.20	1.5	.09
<b>Education of reference person</b>						
Less than 9 years	2.7	1.13	1.3	.25	1.9	.25
Some/complete high school	.9	.13	.9	.09	1.0	.03
Post secondary certificate or degree	.5	.07	.6	.11	.5	.02
University certificate or diploma	.3	.06	.3	.05	.5	.12
Not stated	.1	.0	1.8	.93	.6	.36
<b>Household type</b>						
One person	1.6	.76	1.1	.14	.2	.17
Married couple only	1.1	.18	.9	.15	.9	.04
Married couple with single children	.6	.13	.6	.10	.5	.03
Married couple with relatives/others	1.1	.31	1.1	.29	.8	.07
Lone parent families	.6	.10	.6	.10	.6	.05
Other HHs with relatives only	1.0	.37	1.1	.25	.9	.10
Other households unrelated people	.3	.10	.31	.07	.11	.27
<b>Presence of children</b>						
No children	1.1	.19	1.0	.09	1.1	.06
One child	.8	.31	.5	.10	.6	.04
Two or more children	.4	.05	.5	.05	.5	.03
<b>Presence of spouse</b>						
No spouse	.8	.10	.9	.09	1.2	.10
Spouse	1.1	.38	.7	.08	.7	.02
<b>Work patterns, couples only</b>						
Both work FTFY	.5	.08	.4	.04	.5	.02
One FTFY, one PTFF	1.4	.78	.5	.13	.7	.07
Other	1.0	.19	1.0	.09	1.1	.06

Table 9- (continued)

## Average Gambling Expenditures as a Percentage of Total Household Income\*

	Nova Scotia		Saskatchewan		Canada	
	Mean%	S.E.	Mean%	S.E.	Mean%	S.E.
<b>Main source of income</b>						
Wages and salaries	.6	.09	.6	.06	.6	.02
Self employment	.7	.14	.9	.18	.7	.06
Investments	.2	.11	.5	.23	2.9	1.35
Government transfers	1.8	.51	1.2	.17	1.7	.12
Other sources	.6	.11	1.3	.40	.9	.07
<b>Employment insurance income</b>						
Recipient households	.7	.08	.7	.12	.7	.04
Non-recipient household	1.0	.18	.8	.07	.9	.05
<b>Social assistance income</b>						
Recipient households	.7	.14	1.3	.30	1.1	.07
Non-recipient household	.9	.15	.7	.06	.9	.04
<b>Low-income cut-off</b>						
HHs below low-income cut-off	2.1	.84	1.1	.16	1.9	.21
HHs above low-income cut-off	.7	.07	.7	.07	.7	.02
<b>Size of area of residence</b>						
30,000 and over	.80	.10	.8	.07		
less than 30,000	.90	.31	.7	.21		
Rural	1.1	.38	.9	.17		

\* For households with gambling expenditures

\*\* S.E. = Standard Error

**Table 10- OLS Regressions - Gambling Expenditures as a Proportion of Total Household income**

	NS	SASK	CAN1	CAN2
<b>Variable</b>				
Intercept	.020** (.009)	.012* (.004)	.014* (.002)	.015* (.002)
Total HH income before tax	-3.90E-7* (1.4E-7)	-1.32E-7*** (8.0E-8)	-2.12E-7* (4.0E-8)	-2.11E-7* (4.0E-8)
Total HH income before tax(squared)	1.430E-12*** (.000)	5.068E-13 (.000)	7.823E-13* (.000)	7.802E-13* (.000)
Respondent age 15-24	-.002 (.009)	-.003 (.003)	-.004 (.003)	-.004 (.003)
Respondent age 25-34	-.001 (.004)	-.000 (.002)	-.001 (.001)	-.001 (.001)
Respondent age 45-54	.010** (.004)	.002 (.002)	.002 (.001)	.002 (.001)
Respondent age 55-64	.000 (.005)	.004*** (.002)	.004** (.002)	.004** (.002)
Respondent age 65+	-.008 (.006)	.005*** (.003)	-.002 (.002)	-.002 (.002)
Respondent < 9 yrs educ	.015* (.005)	-.000 (.002)	.006* (.002)	.006* (.001)
Respondent cert or diploma	-.001 (.004)	-.002 (.001)	-.003* (.001)	-.003* (.001)
Respondent university educ	.000 (.005)	-.005** (.002)	-.002 (.001)	-.002 (.001)
No spouse in HH	-.003 (.004)	-.003 (.002)	.002 (.001)	.002 (.001)
Respondent & spouse work FTFY	-.006 (.005)	-.002 (.002)	-.000 (.001)	-.000 (.001)
Respondent & spouse combination FTFY-PTFY	.005 (.005)	-.001 (.002)	.002 (.001)	.002 (.001)
# adults 15+	.000 (.002)	.001 (.001)	.000 (.001)	.000 (.001)
EI recipient	-.006 (.004)	-.001 (.002)	-.000 (.001)	-.000 (.001)
Social assistance recipient	-.015** (.006)	.005** (.003)	-.006* (.002)	-.006* (.002)
Most income from self-emp	-.001 (.005)	.001 (.002)	-.000 (.002)	-.000 (.002)
Most income from investments	.000 (.017)	-.005 (.004)	.022* (.003)	.022* (.003)
Most income from gov't transfers	.009 (.006)	-.002 (.003)	.006* (.002)	.006* (.002)
Most income from other sources	.001 (.006)	.001 (.003)	.001 (.002)	.001 (.002)

**Table 10- (continued)**  
**OLS Regressions - Gambling Expenditures as a Proportion of Total Household income**

	NS	SASK	CAN1	CAN2
Variable				
One child in house	.001 (.005)	-.002 (.002)	-.000 (.001)	-.000 (.001)
Two or more children in house	.001 (.005)	-.002 (.002)	-.001 (.001)	-.001 (.001)
Resides in urban area > 30,000	.002 (.004)	.002 (.002)		
Resides in rural area	.002 (.005)	.000 (.003)		
Resides NFLD			.002 (.003)	
Resides PEI			.000 (.006)	
Resides NS			.000 (.002)	
Resides NB			.001 (.003)	
Resides QUE			.000 (.001)	
Resides MAN			.002 (.002)	
Resides SASK			-.001 (.002)	
Resides ALB			.002 (.002)	
Resides BC			.000 (.001)	
Gov't casinos present				-.001 (.001)
VLT's present				.001 (.001)

Notes: For households with gambling expenditures.

All variables except household income and # adults are dummy variables.

Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

**Table 11-Percentage of Households Who are in the Top Gambling Expenditure Quintile\***

	Nova Scotia	Saskatchewan	Canada
	%	%	%
<b>Before Tax Income</b>			
\$0-\$20,000	12	9	13
\$20,000 - \$39,999	20	18	19
\$40,000 - \$59,999	26	24	21
\$60,000 - \$79,999	18	26	23
\$80,000 and over	20	30	25
<b>Age of reference person</b>	<i>not sig</i>		
<25	18	3	7
25-34	12	13	15
35-44	19	19	18
45-54	26	24	23
55-64	21	32	26
65 and over	21	20	24
<b>Education of reference person</b>			
Less than 9 years	41	22	25
Some/complete high school	20	25	23
Post secondary certificate or degree	16	14	15
University certificate or diploma	12	13	12
Not stated	0	27	5
<b>Household type</b>			
One person	11	14	14
Married couple only	23	26	25
Married couple with single children	21	18	20
Married couple with relatives/others	45	44	31
Lone parent families	11	12	11
Other HHs with relatives only	25	39	23
Other households unrelated people	15	5	20
<b>Presence of children</b>	<i>not sig</i>		
No children	21	23	22
One child	20	17	19
Two or more children	16	15	14
<b>Presence of spouse</b>			
No spouse	13	15	15
Spouse	23	23	23
<b>Work patterns, couples only</b>	<i>not sig</i>	<i>not sig</i>	<i>not sig</i>
Both work FTFY	20	22	22
One FTFY, one PTFY	26	23	22
Other	25	25	23

Table 11- (continued)

Percentage of Households Who are in the Top Gambling Expenditure Quintile\*

	Nova Scotia	Saskatchewan	Canada
	%	%	%
<b>Main source of income</b>	<i>all not sig</i>		<i>all not sig</i>
Wages and salaries	20	21 ( <i>not sig</i> )	20
Self employment	27	28 ( <i>not sig</i> )	22
Investments	0	6 ( <i>sig at 90%</i> )	15
Government transfers	18	13	20
Other sources	19	29 ( <i>not sig</i> )	22
<b>Employment insurance income</b>	<i>not sig</i>	<i>not sig</i>	<i>not sig</i>
Recipient households	22	25	21
Non-recipient household	19	19	20
<b>Social assistance income</b>			
Recipient households	9	11	14
Non-recipient household	21	21	21
<b>Low-income cut-off</b>			
HHs below low-income cut-off	12	9	13
HHs above low-income cut-off	21	22	21
<b>Size of area of residence</b>		<i>not sig</i>	
30,000 and over	25	20	
less than 30,000	14	17	
Rural	14	21	

\* For households with gambling expenditures.

Unless otherwise indicated, differences in percentages are significant with at least a 95% level of confidence.

**Table 12- Probit Regressions - Probability of Being in the Top Gambling Expenditure Quintile**

	NS	SASK	CAN1	CAN2
<b>Variable</b>				
Intercept	-1.386* (.348)	-1.78* (.352)	-1.088* (.087)	-1.068* (.089)
Total HH income before tax	-2.07E-7 (2.525E-6)	.10E-5* (2.49E-6)	4.589E-6* (6.343E-7)	4.572E-6* (6.33E-7)
Respondent age 15-24	.276 (.411)	-.808 (.513)	-.493* (.138)	-.485* (.138)
Respondent age 25-34	-.177 (.203)	-.017 (.187)	-.011 (.052)	-.010 (.052)
Respondent age 45-54	.143 (.176)	.108 (.185)	.063 (.052)	.065 (.052)
Respondent age 55-64	-.013 (.234)	.467** (.216)	.231* (.063)	.231* (.063)
Respondent age 65+	.082 (.257)	.590** (.275)	.287* (.073)	.284* (.072)
Respondent < 9 yrs educ	.716* (.186)	-.174 (.200)	.022 (.054)	.025 (.053)
Respondent cert or diploma	-.287*** (.151)	-.506* (.144)	-.351* (.042)	-.349* (.042)
Respondent university educ	-.501** (.218)	-.907* (.219)	-.642* (.059)	-.640* (.059)
No spouse in HH	-.209 (.170)	.085 (.174)	-.129* (.048)	-.129* (.048)
Respondent & spouse work FTFY	-.237 (.220)	-.242 (.199)	-.023 (.058)	-.023 (.058)
Respondent & spouse work combination FTFY-PTFY	.169 (.208)	.225 (.194)	.049 (.058)	.050 (.057)
# adults 15+	.236* (.082)	.151*** (.091)	.079* (.023)	.080* (.023)
EI recipient	-.025 (.152)	.230 (.174)	.067 (.047)	.069 (.047)
Social assistance recipient	-.474*** (.281)	.080 (.262)	-.155** (.066)	-.156** (.066)
Most income from self-emp	.219 (.217)	.206 (.202)	.034 (.071)	.033 (.071)
Most income from investments	-8.791 (7.209E9)	-1.026** (.499)	-.348* (.133)	-.344* (.133)
Most income from gov't transfers	-.055 (.231)	-.429*** (.245)	-.035 (.064)	-.029 (.064)
Most income from other sources	-.068 (.248)	.034 (.255)	-.097 (.073)	-.096 (.073)

**Table 12- (continued)**  
**Probit Regressions - the Probability of Being in the Top Gambling Expenditure Quintile**

	NS	SASK	CAN1	CAN2
<b>Variable</b>				
One child in house	-.040 (.187)	-.225 (.191)	-.089*** (.052)	-.087 (.052)
Two or more children in house	-.048 (.198)	-.224 (.185)	-.266* (.054)	-.266* (.054)
Resides in urban area > 30,000	.369*** (.197)	.311*** (.186)		
Resides in rural area	-.218 (.217)	.232 (.240)		
Resides NFLD			.287** (.120)	
Resides PEI			-.186 (.277)	
Resides NS			-.146 (.101)	
Resides NB			-.003 (.111)	
Resides QUE			-.001 (.042)	
Resides MAN			.013 (.087)	
Resides SASK			.001 (.095)	
Resides ALB			-.006 (.062)	
Resides BC			.012 (.053)	
Gov't casinos present				-.028 (.037)
VLT's present				-.003 (.033)

Notes: For households with gambling expenditures.

All variables except household income, # adults are dummy variables.

Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence



**Table 13 - Percentage of Households Who are in the High Gambling Group (top 25%, Gambling Expenditures as a Proportion of Income)\***

	Nova Scotia	Saskatchewan	Canada
<b>Before Tax Income</b>			
\$0-\$20,000	35	35	41
\$20,000 - \$39,999	31	29	32
\$40,000 - \$59,999	25	24	23
\$60,000 - \$79,999	13	17	17
\$80,000 and over	11	10	10
<b>Age of reference person</b>			
<25	35	32	20
25-34	17	17	17
35-44	19	18	18
45-54	27	23	23
55-64	27	34	35
65 and over	36	37	40
<b>Education of reference person</b>			
Less than 9 years	59	41	44
Some/complete high school	26	30	30
Post secondary certificate or degree	18	17	16
University certificate or diploma	7	8	9
Not stated	0	55	17
<b>Household type</b>	<i>not sig</i>		
One person	24	32	32
Married couple only	31	31	30
Married couple with single children	21	14	17
Married couple with relatives/others	34	40	26
Lone parent families	24	25	21
Other households with relatives only	33	40	27
Other households unrelated people	11	10	25
<b>Presence of children</b>	<i>sig at 90%</i>		
No children	28	30	29
One child	23	22	19
Two or more children	16	12	15
<b>Presence of spouse</b>	<i>not sig</i>		
No spouse	26	30	29
Spouse	24	22	23
<b>Work patterns, couples only</b>			
Both work FTFY	17	17	18
One FTFY, one PTFY	23	15	18
Other	28	29	29

Table 13 - (continued)

Percentage of Households Who are in the High Gambling Group (top 25%, Gambling Expenditures as a Proportion of Income)\*

	Nova Scotia	Saskatchewan	Canada
<b>Main source of income</b>			
Wages and salaries	21	19	19
Self employment	25 ( <i>not sig</i> )	30 ( <i>not sig</i> )	24 ( <i>not sig</i> )
Investments	0 ( <i>not sig</i> )	18 ( <i>not sig</i> )	26 ( <i>not sig</i> )
Government transfers	36	39	42
Other sources	24 ( <i>not sig</i> )	31 ( <i>not sig</i> )	27 ( <i>not sig</i> )
<b>Employment insurance income</b>	<i>not sig</i>	<i>not sig</i>	<i>not sig</i>
Recipient households	27	26	24
Non-recipient household	24	25	25
<b>Social assistance income</b>	<i>not sig</i>		
Recipient households	22	37	33
Non-recipient household	25	24	24
<b>Low-income cut-off</b>			
Households below low-income cut-off	35	36	40
Households above low-income cut-off	23	23	22
<b>Size of area of residence</b>			
30,000 and over	28	24	
less than 30,000	23	24	
Rural	21	31	

\* For households with gambling expenditures.

Unless otherwise indicated, differences in percentages are significant with at least a 95% level of confidence.

**Table 14- Probit Regressions - Probability of Being in the High Gambling Group (top 25%, Gambling Expenditures as a Proportion of Income)**

Variable	NS	SASK	CAN1	CAN2
Intercept	-.693** (.338)	-.520 (.326)	-.279* (.087)	-.345* (.090)
Total HH income before tax	-9.86E-6* (3.056E-6)	-5.07E-6** (2.808E-6)	-7.78E-6* (7.908E-7)	-7.74E-7* (7.89E-7)
Respondent age 15-24	.493 (.357)	.034 (.282)	-.258** (.105)	-.252** (.105)
Respondent age 25-34	-.005 (.194)	-.059 (.181)	-.091*** (.051)	-.088*** (.051)
Respondent age 45-54	.249 (.176)	.059 (.182)	.092*** (.052)	.094*** (.052)
Respondent age 55-64	.071 (.226)	.161 (.205)	.291* (.061)	.292* (.061)
Respondent age 65+	.222 (.240)	.112 (.247)	.240* (.068)	.238* (.068)
Respondent < 9 yrs educ	.765* (.177)	.037 (.176)	.059 (.050)	.062 (.050)
Respondent cert or diploma	-.264*** (.144)	-.346* (.133)	-.356* (.041)	-.356* (.041)
Respondent university educ	-.608** (.236)	-.736* (.231)	-.598* (.060)	-.596* (.060)
No spouse in HH	-.252 (.162)	-.047 (.159)	-.075*** (.046)	-.074 (.045)
Respondent & spouse work FTFY	-.188 (.226)	-.006 (.205)	.006 (.061)	.006 (.060)
Respondent & spouse work combination FTFY-PTFY	.088 (.211)	-.035 (.199)	.031 (.059)	.033 (.059)
# adults 15+	.157*** (.083)	.029 (.089)	.020 (.024)	.022 (.024)
EI recipient	-.037 (.147)	.203 (.166)	.032 (.046)	.032 (.046)
Social assistance recipient	-.337 (.236)	.270 (.215)	-.032 (.058)	-.034 (.058)
Most income from self-emp	.220 (.218)	.157 (.198)	.136*** (.070)	.132*** (.070)
Most income from investments	-9.111 (6.578E9)	-.309 (.391)	-.138 (.120)	-.135 (.120)
Most income from gov't transfers	.102 (.215)	.158 (.210)	.116** (.059)	.119** (.059)
Most income from other sources	-.005 (.239)	.176 (.240)	-.069 (.070)	-.068 (.070)

Table 14- (continued) Probit Regressions - Probability of Being in the High Gambling Group (top 25%, Gambling Expenditures as a Proportion of Income)				
	NS	SASK	CANI	CAN2
Variable				
One child in house	.041 (.183)	-.172 (.178)	-.109** (.051)	-.107** (.052)
Two or more children in house	-.102 (.198)	-.504* (.182)	-.224* (.053)	-.223* (.053)
Resides in urban area > 30,000	.302*** (.182)	.126 (.171)		
Resides in rural area	-.188 (.197)	.190 (.218)		
Resides NFLD			.220*** (.118)	
Resides PEI			-.039 (.251)	
Resides NS			-.014 (.093)	
Resides NB			.056 (.105)	
Resides QUE			.076*** (.040)	
Resides MAN			.084 (.083)	
Resides SASK			.026 (.090)	
Resides ALB			.064 (.060)	
Resides BC			-.104*** (.054)	
Gov't casinos present				.040 (.037)
VLT's present				.096* (.032)

Notes: For households with gambling expenditures.  
 All variables except household income, #adults are dummy variables.  
 Standard errors are in brackets.  
 Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

**Table 15**  
**Financial Well-Being**

**Expenditures on Necessities and Indicators of**

**Nova Scotia, Saskatchewan and Canada**

	Food for Home	Principal Home	Change in Assets/Debts	Change in RRSP	(Household Income - expenses)
<b>Nova Scotia</b>					
Mean expenditures (\$) - All	4,045	6,546	2,605	1,298	2,174
Mean Expenditures (\$) - only those who gambled	4,208	6,687	2,623	1,424	2,863
Mean Expenditures (\$) - only those who did not gamble	3,275	5,876	2,519	702	2,029
Mean Expenditure as a Percentage of Household Income- only those who gambled	12.2	19.9	-0.47	1.8	-0.03
Mean Expenditure as a Percentage of Household Income- only those who did not gamble	12.9	25.3	4.0	0.23	0.04
<b>Saskatchewan</b>					
Mean expenditures (\$) - All	3,750	6,180	2,455	1,388	1,700
Mean Expenditures (\$) - only those who gambled	3,906	6,329	2,816	1,516	1,938
Mean Expenditures (\$) - only those who did not gamble	3,019	5,486	765	790	582
Mean Expenditure as a Percentage of Household Income- only those who gambled	10.7	18.2	1.6	1.8	-3.4
Mean Expenditure as a Percentage of Household Income- only those who did not gamble	17.3	33.7	-29.3	1.0	-36.5
<b>Canada</b>					
Mean expenditures (\$) - All	4,399	8,014	3,762	1,582	2,609
Mean Expenditures (\$) - only those who gambled	4,538	8,177	3,805	1,685	2,594
Mean Expenditures (\$) - only those who did not gamble	3,790	7,297	3,574	1,132	2,667
Mean Expenditure as a Percentage of Household Income- only those who gambled	11.9	22.6	-2.6	1.2	-7.3
Mean Expenditure as a Percentage of Household Income- only those who did not gamble	14.4	31.1	-6.6	0.7	-16.1

**Table 16- OLS Regressions - Household Expenditures on Food For Home**

	NS	SASK	CAN
<b>Variable</b>			
Intercept	609.652*** (329.062)	734.280** (351.445)	430.913* (114.467)
Total HH income before tax	.027* (.005)	.014** (.006)	.023* (.002)
Total HH income before tax squared	-2.994E-8 (.000)	9.331E-10 (.000)	-3.433E-8* (.000)
Respondent age 15-24	-580.338*** (321.664)	-911.104* (281.923)	-532.936* (107.796)
Respondent age 25-34	-601.014* (164.334)	-467.885* (160.354)	-358.067* (54.472)
Respondent age 45-54	284.724*** (158.205)	334.628*** (172.154)	193.987* (57.189)
Respondent age 55-64	298.126 (198.674)	288.737 (207.207)	351.603* (70.848)
Respondent age 65+	771.058* (214.067)	172.337 (236.989)	251.877* (77.860)
Respondent < 9 yrs educ	318.826*** (171.969)	-214.247 (177.645)	289.879* (59.979)
Respondent cert or diploma	15.977 (127.890)	-121.947 (126.436)	15.494 (45.623)
Respondent university educ	-99.101 (173.182)	70.841 (178.290)	17.253 (56.648)
No spouse in HH	-433.514* (146.229)	-459.165* (156.142)	-321.323* (51.915)
Respondent & spouse work FTFY	165.443 (200.928)	-141.551 (188.754)	43.177 (66.415)
Respondent & spouse work combination FTFY-PTFY	-182.119 (191.161)	203.323 (184.645)	-87.502 (65.061)
Total persons in HH in 1996	712.521* (71.134)	875.926* (77.150)	1136.180* (25.485)
EI recipient	-202.576 (136.225)	70.093 (164.170)	158.441* (52.308)
Social assistance recipient	133.942 (207.158)	-131.663 (206.296)	-97.936 (67.380)
Most income from self-emp	225.253 (193.346)	-87.659 (198.478)	129.051*** (77.521)
Most income from investments	-439.359 (487.473)	-23.434 (335.181)	-188.901 (128.194)
Most income from gov't transfers	-79.212 (196.121)	131.602 (214.277)	90.213 (71.166)
Most income from other sources	-398.657*** (214.210)	336.425 (246.534)	179.364** (80.878)

**Table 16- (continued)**  
**OLS Regressions - Household Expenditures on Food For Home**

	NS	SASK	CAN
<b>Variable</b>			
One child in house	83.681 (181.534)	-112.656 (190.439)	-301.679* (62.550)
Two or more children in house	249.298 (207.678)	-237.538 (231.193)	-718.764* (77.167)
Resides in urban area > 30,000	329.123** (154.369)	279.607*** (159.851)	
Resides in rural area	305.722*** (166.833)	254.364 (205.637)	
Gov't casinos present			85.621** (40.340)
VLT's present			24.049 (36.091)
Low Gambling Group	104.222 (170.453)	90.182 (169.738)	-99.727*** (58.689)
Middle Gambling Group	284.087*** (149.752)	69.259 (154.059)	57.147 (51.591)
High Gambling Group	247.380 (169.552)	222.810 (170.810)	174.456* (58.391)

Notes: All variables except household income, # persons, are dummy variables.  
Standard errors are in brackets.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

**Table 17- OLS Regression - Household Expenditures on Principal Accommodation**

	NS	SASK	CAN
Variable			
Intercept	3852.064* (656.761)	3155.884* (670.077)	4773.306* (256.205)
Total HH income before tax	.064* (.011)	.066* (.011)	.061* (.004)
Total HH income before tax squared	-1.42E-7** (6.0E-8)	-1.93E-7* (6.0E-8)	-6.722E-8* (.000)
Respondent age 15-24	-720.167 (638.996)	708.705 (546.822)	-173.262 (241.364)
Respondent age 25-34	549.481*** (326.710)	700.215** (305.630)	454.872* (121.905)
Respondent age 45-54	-854.185* (316.230)	-448.229 (327.924)	-766.894* (128.067)
Respondent age 55-64	-830.353** (397.801)	-724.847*** (395.017)	-1264.781* (158.488)
Respondent age 65+	-1157.664* (426.031)	-295.886 (452.541)	-1299.595* (174.240)
Respondent < 9 yrs educ	225.857 (338.108)	-229.774 (339.961)	-164.047 (134.305)
Respondent cert or diploma	652.771** (254.665)	113.459 (240.074)	254.860** (101.836)
Respondent university educ	840.163** (345.096)	752.249** (338.467)	574.575* (126.328)
No spc.ase in HH	301.748 (291.366)	-6.607 (298.064)	516.033* (116.230)
Respondent & spouse work FTFY	-42.553 (400.187)	-621.316*** (359.045)	-76.202 (148.671)
Respondent & spouse work combination FTFY-PTFY	197.291 (380.482)	133.655 (350.791)	-9.688 (145.674)
Total persons in HH in 1996	249.210*** (141.817)	276.167*** (147.355)	441.125* (57.056)
EI recipient	-425.995 (271.181)	-376.913 (311.850)	-331.918* (117.078)
Social assistance recipient	503.125 (410.850)	-258.834 (395.719)	-216.119 (150.859)
Most income from self-emp	-237.502 (384.593)	97.022 (377.233)	444.010** (173.447)
Most income from investments	-949.601 (969.025)	-707.490 (637.435)	364.350 (286.718)
Most income from gov't transfers	163.416 (390.553)	-207.131 (407.465)	145.775 (159.208)
Most income from other sources	-381.961 (427.132)	-982.718** (468.195)	-242.436 (181.122)



Table 17 - (continued)

## OLS Regression - Household Expenditures on Principal Accommodation

	NS	SASK	CAN
<b>Variable</b>			
One child in house	486.411 (360.392)	-15.796 (362.635)	67.477 (139.984)
Two or more children in house	-541.646 (413.058)	140.058 (440.309)	246.520 (172.754)
Resides in urban area > 30,000	184.113 (306.083)	690.146** (303.988)	
Resides in rural area	-959.456* (331.876)	-601.951 (391.481)	
Gov't casinos present			75.452 (90.267)
VLT's present			-1767.896* (80.742)
\$ spent on gambling	-.221 (.221)	.112 (.203)	-.171* (.063)
Household gambles	12.981 (280.517)	-205.069 (271.803)	352.969* (107.243)

Notes: All variables except household income, # persons, are dummy variables.

Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

**Table 18- OLS Regressions - Net Change in Assets minus Liabilities**

Variable	NS	SASK	CAN
Intercept	-2696.429 (2841.483)	-4470.987 (3190.418)	-1003.215 (861.105)
Total HH income before tax	.193* (.047)	.305* (.0534)	.161* (.013)
Total HH income before tax squared	.000 (.000)	-8.14E-7* (3.0E-7)	4.21E-7* (7.0E-8)
Respondent age 15-24	1123.243 (2766.487)	-3991.152 (2548.565)	-1103.143 (806.379)
Respondent age 25-34	-418.690 (1413.986)	-2308.767 (1448.723)	-55.296 (407.440)
Respondent age 45-54	-1912.414 (1360.800)	-3217.568** (1555.612)	-1016.959** (427.704)
Respondent age 55-64	-3082.330*** (1709.748)	-561.537 (1871.726)	-434.337 (529.855)
Respondent age 65+	1802.774 (1846.871)	-3213.227 (2145.331)	714.564 (582.305)
Respondent < 9 yrs educ	831.730 (1487.772)	-874.118 (1605.175)	250.623 (448.928)
Respondent cert or diploma	-488.704 (1099.692)	-1178.152 (1143.038)	-815.345** (341.274)
Respondent university educ	-1530.454 (1489.124)	-1873.653 (1612.985)	-1696.283* (423.687)
No spouse in HH	-1241.753 (1260.635)	2174.727 (1140.438)	-851.229** (388.523)
Respondent & spouse work FTFY	-55.690 (1728.515)	-149.502 (1705.495)	285.204 (496.714)
Respondent & spouse work combination FTFY-PTFY	-1130.989 (1643.719)	1875.822 (1668.433)	120.337 (486.593)
Total persons in HH in 1996	-1648.050* (612.371)	-1452.650** (698.741)	-2050.447* (190.727)
EI recipient	1025.069 (1171.457)	628.126 (1484.835)	389.233 (391.247)
Social assistance recipient	1301.458 (1808.156)	2470.993 (1895.797)	2179.049* (508.239)
Most income from self-emp	-310.450 (1662.822)	360.132 (1792.877)	-459.495 (579.770)
Most income from investments	-6419.477 (4192.245)	4964.913 (3038.604)	453.067 (958.952)
Most income from gov't transfers	1315.753 (1707.805)	3725.752*** (1947.848)	676.982 (535.504)
Most income from other sources	392.781 (1850.386)	1759.422 (2228.332)	1854.336* (604.953)

**Table 18 - (continued)**  
**OLS Regressions - Net Change in Assets minus Liabilities**

	NS	SASK	CAN
<b>Variable</b>			
One child in house	-255.682 (1562.366)	-626.349 (1720.642)	763.977 (467.903)
Two or more children in house	1321.040 (1785.794)	698.997 (2090.946)	2343.372* (577.324)
Resides in urban area > 30,000	2594.601*** (1328.219)	-1132.160 (1445.280)	
Resides in rural area	3130.555** (1434.542)	-647.167 (1857.607)	
Gov't casinos present			-23.614 (301.728)
VLT's present			818.972* (269.951)
Low Gambling Group	261.425 (1467.777)	1641.973 (1533.453)	42.760 (439.360)
Middle Gambling Group	-1936.927 (1289.989)	270.981 (1392.250)	-593.399 (386.288)
High Gambling Group	-3141.790** (1460.670)	-1207.991 (1543.601)	-1942.059* (436.890)
No net change in assets and debits	656.072 (1728.946)	-102.080 (1804.297)	301.159 (488.510)

Notes: All variables except household income, # persons, are dummy variables.

Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

**Table 19- OLS Regressions- Change in RRSP Balances**

	NS	SASK	CAN
<b>Variable</b>			
Intercept	448.314 (1130.001)	814.920 (869.446)	2478.055* (291.459)
Total HH income before tax	.058* (.018)	.029** (.015)	.011** (.005)
Total HH income before tax Squared	70.796E-8 (.000)	2.03E-7** (8.0E-8)	2.99E-7* (2.0E-8)
Respondent age 15-24	154.404 (1058.230)	107.035 (670.309)	-44.411 (262.792)
Respondent age 25-34	-112.537 (540.968)	137.890 (381.187)	-211.954 (132.793)
Respondent age 45-54	941.013*** (520.600)	219.170 (409.653)	307.307** (139.459)
Respondent age 55-64	483.349 (655.780)	379.723 (493.072)	19.643 (172.676)
Respondent age 65+	-467.079 (705.430)	-276.222 (567.347)	-622.217* (190.137)
Respondent < 9 yrs educ	379.582 (561.473)	322.880 (422.310)	48.656 (146.264)
Respondent cert or diploma	-882.877** (423.089)	8.709 (300.875)	-13.302 (111.151)
Respondent university educ	-466.736 (572.179)	-655.462 (426.009)	-329.450** (137.765)
No spouse in HH	389.028 (482.161)	321.975 (370.954)	-92.590 (126.570)
Respondent & spouse work FTFY	928.966 (661.800)	179.034 (449.260)	101.232 (161.957)
Respondent & spouse work combination FTFY-PTFY	-1734.397* (629.853)	365.116 (439.030)	-294.410*** (158.661)
Total persons in HH in 1996	-384.075 (236.988)	-274.317 (184.225)	-391.954* (62.335)
EI recipient	-142.588 (448.980)	451.013 (389.643)	-29.591 (127.546)
Social assistance recipient	-128.812 (680.623)	586.187 (495.882)	203.597 (164.539)
Most income from self-emp	177.393 (636.623)	49.715 (472.137)	70.203 (189.088)
Most income from investments	-2051.215 (1612.869)	606.093 (798.694)	61.888 (312.974)
Most income from gov't transfers	927.475 (647.506)	-92.361 (509.102)	347.348** (173.705)
Most income from other sources	-356.253 (709.279)	-284.399 (591.581)	-101.666 (197.762)

**Table 19- (continued)**  
**OLS Regressions- Change in RRSP Balances**

	NS	SASK	CAN
<b>Variable</b>			
One child in house	494.774 (596.049)	253.811 (452.320)	220.685 (152.464)
Two or more children in house	787.357 (684.702)	738.574 (550.439)	577.725* (188.233)
Resides in urban area > 30,000	733.284 (506.729)	352.083 (380.238)	
Resides in rural area	280.310 (549.504)	244.363 (489.831)	
Gov't casinos present			2.244 (98.417)
VLT's present			123.777 (87.933)
\$ spent on gambling	-.611*** (.367)	-.511** (.253)	-.224* (.068)
Household gambles	20.827 (463.401)	-190.388 (338.103)	-79.411 (116.721)
No change in RRSP	-2341.075* (419.242)	-2003.863* (305.688)	-2494.028* (104.168)

Notes: All variables except household income, # persons, and \$ gambling, are dummy variables. Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

**Table 20- OLS Regressions - Total Household Income minus Expenditures**

Variable	NS	SASK	CAN
Intercept	-3716.900 (2768.789)	-4736.388*** (2472.491)	-3544.769* (795.140)
Total HH income before tax	.267* (.045)	.291* (.041)	.214* (.0124)
Total HH income before tax squared	-.000 (.000)	-.000 (.000)	2.81E-7* (6.0E-8)
Respondent age 15-24	766.110 (2706.330)	-4954.864** (1978.690)	-1458.912*** (748.993)
Respondent age 25-34	-1369.663 (1383.622)	-1841.062 (1125.684)	-669.040*** (378.639)
Respondent age 45-54	-1303.413 (1331.527)	-1473.734 (1209.275)	-412.507 (397.563)
Respondent age 55-64	-1559.658 (1676.509)	2137.002 (1455.382)	789.777 (492.174)
Respondent age 65+	3077.886*** (1801.600)	-.952.016 (1667.948)	2395.003* (541.105)
Respondent < 9 yrs educ	1073.616 (1432.093)	502.839 (1247.292)	602.393 (417.009)
Respondent cert or diploma	-1102.669 (1077.137)	-69.911 (884.420)	-1001.321* (316.407)
Respondent university educ	-2188.794 (1455.804)	-2557.507** (1250.087)	-3125.579* (392.191)
No spouse in HH	-2011.085 (1232.612)	908.346 (1095.622)	-1030.366* (360.780)
Respondent & spouse work FTFY	872.735 (1692.677)	772.657 (1326.238)	1101.573** (461.747)
Respondent & spouse work combination FTFY-PTFY	-402.011 (1610.966)	1076.384 (1295.822)	-294.399 (452.381)
Total persons in HH in 1996	-2458.029* (597.479)	-2199.809* (542.017)	-2466.904* (177.224)
EI recipient	1138.221 (1148.310)	1033.194 (1150.767)	978.117* (363.664)
Social assistance recipient	2194.909 (1740.016)	2266.008 (1452.394)	3399.382* (468.441)
Most income from self-emp	388.892 (1628.278)	636.252 (1392.475)	-1527.704* (538.906)
Most income from investments	-1841.156 (4103.961)	4598.270*** (2353.671)	-80.344 (891.185)
Most income from gov't transfers	1308.916 (1651.651)	4662.878* (1502.769)	754.265 (494.664)
Most income from other sources	1223.617 (1807.190)	760.486 (1728.866)	2333.353* (562.274)

Table 20 - (continued)

## OLS Regressions - Total Household Income minus Expenditures

	NS	SASK	CAN
Variable			
One child in house	1447.609 (1524.510)	2332.394*** (1335.470)	1091.773** (434.733)
Two or more children in house	2235.440 (1747.568)	2993.791*** (1624.097)	2295.225* (536.479)
Resides in urban area > 30.000	3135.415** (1295.825)	-2267.502** (1121.985)	
Resides in rural area	3835.517* (1404.933)	-1919.544 (1442.898)	
Gov't casinos present			378.280 (280.405)
VLT's present			1227.904* (250.728)
\$ spent on gambling	-1.787*** (.939)	-1.334*** (.748)	-1.361* (.195)
Household gambles	-2283.806*** (1184.891)	-441.446 (997.543)	-1307.225* (332.693)

Notes: All variables except household income, # persons, \$ gambling, are dummy variables. Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

Table 21 Expenditures on Leisure/Entertainment Activities and Charities - Nova Scotia, Saskatchewan and Canada							
	Gambling	Recreation	Recreation Services	Home Entertainment	Food from Restaurants	Alcohol from Licensed Premises	Charitable Gifts and Donations
<b>Nova Scotia</b>							
Mean expenditure (\$) - All	221	2,259	760	482	1,234	126	1,602
Mean expenditure (\$) - only those who gambled	267	2,457	814	517	1,361	144	1,584
Mean expenditure (\$) - only those who did not gamble	0	1,322	505	320	634	38	1,685
Mean expenditure as a Percentage of Household Income - only those who gambled	0.91	5.25	0.87	1.2	2.91	0.34	3.6
Mean expenditure as a Percentage of Household Income - only those who did not gamble	0	3.89	1.65	0.89	1.82	0.13	5.6
Total Expenditures (\$) - only those who gambled	71,836,475	660,857,754	218,837,841	138,909,113	365,927,550	38,817,302	426,051,055
<b>Saskatchewan</b>							
Mean expenditure (\$) - All	236	2,473	801	541	1,387	185	1,929
Mean expenditure (\$) - only those who gambled	287	2,706	861	583	1,460	207	1,900
Mean expenditure (\$) - only those who did not gamble	0	1,383	525	345	1,042	87	2,062
Mean expenditure as a Percentage of Household Income - only those who gambled	0.8	6.0	2.02	1.44	3.50	0.52	4.8
Mean expenditure as a Percentage of Household Income - only those who did not gamble	0	6.2	2.19	1.88	4.29	0.53	7.5
Total Expenditures (\$) - only those who gambled	82,392,740	777,125,439	247,113,066	167,308,546	419,383,207	59,309,262	545,645,843
<b>Canada</b>							
Mean expenditure (\$) - All	258	2,654	968	516	1,506	197	1,753
Mean expenditure (\$) - only those who gambled	317	2,811	1,018	545	1,594	216	1,664
Mean expenditure (\$) - only those who did not gamble	0	1,967	750	387	1,122	114	2,145
Mean expenditure as a Percentage of Household Income - only those who gambled	0.89	5.60	2.2	1.19	3.62	0.46	3.4
Mean expenditure as a Percentage of Household Income - only those who did not gamble	0	5.3	1.2	1.17	3.01	0.31	5.3
Total Expenditures (\$) - only those who gambled	2,813,744,677	24,960,395,293	9,043,501,508	4,842,721,436	14,155,212,996	1,915,814,105	14,776,691,191



**Table 22 - OLS Regressions- Household Expenditures on Home Entertainment**

	NS	SASK	CAN
<b>Variable</b>			
Intercept	-140.063 (168.493)	10.779 (194.317)	79.998 (51.031)
Total HH income before tax	.014* (.003)	.006*** (.003)	.008* (.001)
Total HH income before tax squared	-3.838E-8* (.000)	-2.978E-9 (.000)	-1.198E-8* (.000)
Respondent age 15-24	165.139 (158.758)	352.702** (147.034)	361.429* (45.951)
Respondent age 25-34	116.939 (80.142)	122.790 (82.145)	106.087* (23.114)
Respondent age 45-54	-61.033 (78.268)	-87.040 (90.027)	-105.397* (24.642)
Respondent age 55-64	-232.407** (105.531)	-212.905*** (116.859)	-222.799* (32.049)
Respondent age 65+	-220.485*** (115.260)	-87.369 (145.744)	-187.519* (37.028)
Respondent < 9 yrs educ	-106.520 (102.600)	42.121 (121.673)	90.746* (31.274)
Respondent cert or diploma	-142.263** (64.568)	23.266 (67.597)	7.535 (19.867)
Respondent university educ	-275.424* (84.238)	-27.736 (93.447)	-21.713 (24.387)
No spouse in HH	220.538* (76.966)	186.314** (87.017)	59.460** (23.754)
Respondent & spouse work FTFY	-117.758 (97.646)	-152.321 (99.842)	14.358 (28.093)
Respondent & spouse work combination FTFY-PTFY	55.982 (92.870)	205.757** (97.763)	-9.288 (27.598)
Total persons in HH in 1996	147.532* (34.689)	147.595* (40.332)	69.304* (10.929)
EI recipient	-116.236*** (68.618)	25.111 (86.226)	-8.817 (22.547)
Social assistance recipient	-225.739** (113.585)	-11.525 (124.895)	-79.818** (31.610)
Most income from self-emp	162.309*** (96.643)	114.764 (105.752)	35.477 (33.472)
Most income from investments	-145.360 (316.156)	-125.157 (220.325)	-7.219 (66.307)
Most income from gov't transfers	131.918 (105.866)	-157.012 (128.530)	2.159 (32.994)
Most income from other sources	-89.391 (114.019)	-160.273 (146.442)	-.776 (37.942)

Table 22 - (continued)

## OLS Regressions- Household Expenditures on Home Entertainment

Variable	NS	SASK	CAN
One child in house	-57.473 (87.920)	-144.067 (97.840)	-52.506** (26.599)
Two or more children in house	-274.972* (100.686)	-322.151** (118.780)	-199.729* (32.883)
Resides in urban area > 30,000	-74.691 (82.032)	-89.928 (96.477)	
Resides in rural area	-132.095 (88.797)	-61.241 (123.285)	
Gov't casinos present			-36.262** (18.083)
VLT's present			14.382 (16.313)
\$ spent on gambling	.025 (.064)	.021 (.058)	.029** (.012)
Household gambles	13.041 (78.923)	82.744 (84.951)	40.284*** (22.661)

Notes: All variables except household income, # persons, \$ gambling, are dummy variables. Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

Table 23- OLS Regressions- Household Expenditures on Total Recreation			
	NS	SASK	CAN
Variable			
Intercept	-1291.767* (496.746)	-1146.503** (604.620)	-118.228 (184.645)
Total HH income before tax	.070* (.008)	.057* (.010)	.064* (.003)
Total HH income before tax squared	-1.68E-7* (4.0E-8)	-9.734E-8*** (.000)	-1.21E-7* (1.0E-8)
Respondent age 15-24	78.026 (482.178)	394.538 (477.143)	588.701* (172.297)
Respondent age 25-34	129.441 (246.482)	134.049 (271.477)	125.255 (87.151)
Respondent age 45-54	-311.821 (239.443)	-8.362 (293.633)	-333.585* (91.712)
Respondent age 55-64	-391.275 (306.992)	-658.400*** (352.483)	-420.669* (114.351)
Respondent age 65+	-1032.552* (328.816)	-1137.799* (407.145)	-712.099* (126.141)
Respondent < 9 yrs educ	-474.706*** (262.965)	-43.009 (310.012)	-172.908*** (98.742)
Respondent cert or diploma	-325.815*** (193.446)	411.413*** (213.864)	83.565 (72.873)
Respondent university educ	-272.350 (259.891)	-330.143 (301.905)	83.491 (90.230)
No spouse in HH	560.460** (221.336)	310.486 (265.959)	-24.840 (83.669)
Respondent & spouse work FTFY	337.698 (301.625)	144.360 (321.256)	147.732 (105.868)
Respondent & spouse work combination FTFY-PTFY	-197.497 (287.958)	200.612 (314.703)	-283.455* (103.737)
Total persons in HH in 1996	421.011* (106.665)	380.963* (131.240)	86.802** (40.782)
EI recipient	-136.042 (206.343)	45.261 (278.069)	-246.012* (83.869)
Social assistance recipient	-628.116*** (323.954)	-313.698 (358.763)	-206.437*** (109.905)
Most income from self-emp	261.586 (292.835)	233.879 (338.504)	283.616** (123.900)
Most income from investments	79.018 (803.673)	1014.300*** (583.288)	230.975 (207.812)
Most income from gov't transfers	906.459* (300.903)	589.303 (366.060)	405.817* (114.894)
Most income from other sources	156.801 (326.695)	1251.914* (417.426)	307.208** (130.250)

Table 23 - (continued) OLS Regressions- Household Expenditures on Total Recreation			
	NS	SASK	CAN
Variable			
One child in house	-21.217 (270.644)	-682.544** (323.324)	-15.640 (100.015)
Two or more children in house	-506.303 (311.244)	-497.460 (391.768)	-74.560 (123.379)
Resides in urban area > 30,000	-275.807 (233.820)	21.773 (274.755)	
Resides in rural area	-393.894 (254.562)	-72.619 (354.655)	
Gov't casinos present			-306.248* (64.910)
VLT's present			-2.307 (58.147)
\$ spent on gambling	.033 (.167)	.045 (.181)	.107** (.045)
Household gambles	370.420*** (215.331)	429.754*** (243.909)	180.885** (78.034)

Notes: All variables except household income, # persons, \$ gambling, are dummy variables. Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

Table 24 - OLS Regressions- Household Expenditures on Recreation Services

Variable	NS	SASK	CAN
Intercept	60.032 (224.449)	-346.306 (222.801)	-77.338 (78.322)
Total HH income before tax	.019* (.004)	.019* (.004)	.021* (.001)
Total HH income before tax squared	-5.072E-8* (.000)	-4.313E-8** (.000)	-3.192E-8* (.000)
Respondent age 15-24	-52.100 (214.377)	22.834 (175.120)	31.959 (72.873)
Respondent age 25-34	-45.054 (109.663)	24.837 (98.866)	-50.410 (36.587)
Respondent age 45-54	-202.908*** (107.520)	188.584*** (108.391)	-46.963 (38.664)
Respondent age 55-64	42.982 (139.288)	200.848 (131.445)	-35.691 (48.670)
Respondent age 65+	-265.568*** (149.494)	168.371 (151.882)	101.263*** (54.378)
Respondent < 9 yrs educ	-127.739 (124.127)	-93.157 (118.620)	-116.613* (43.277)
Respondent cert or diploma	57.819 (85.612)	11.762 (78.517)	83.491* (30.665)
Respondent university educ	58.277 (114.724)	-113.260 (109.540)	154.391* (37.789)
No spouse in HH	99.795 (100.030)	266.286* (98.187)	45.178 (35.581)
Respondent & spouse work FTFY	317.940** (132.080)	94.009 (116.848)	45.157 (44.349)
Respondent & spouse work combination FTFY-PTFY	-358.918* (125.917)	-64.043 (114.214)	-106.978** (43.570)
Total persons in HH in 1996	112.370** (47.319)	113.617** (47.834)	20.974 (17.125)
EI recipient	-37.827 (91.944)	-15.421 (101.593)	-184.105* (35.365)
Social assistance recipient	-164.063 (149.547)	-227.449*** (135.298)	-27.038 (48.034)
Most income from self-emp	59.930 (130.675)	15.738 (124.802)	158.748* (52.029)
Most income from investments	10.166 (354.064)	-257.210 (218.502)	143.845 (88.975)
Most income from gov't transfers	223.225 (140.089)	30.674 (134.580)	134.052* (49.758)
Most income from other sources	-55.048 (145.960)	-38.001 (152.775)	348.193* (55.377)

Table 24 - (continued)

## OLS Regressions- Household Expenditures on Recreation Services

	NS	SASK	CAN
<b>Variable</b>			
One child in house	-175.711 (119.426)	-77.461 (117.581)	-94.630** (41.929)
Two or more children in house	-276.624** (137.077)	-45.061 (142.182)	-90.576*** (51.724)
Resides in urban area > 30,000	-248.044** (105.774)	22.115 (100.916)	
Resides in rural area	-316.211* (116.038)	-287.707** (133.338)	
Gov't casinos present			-24.731 (27.393)
VLT's present			-60.244** (24.668)
\$ spent on gambling	.117 (.073)	.077 (.065)	.045** (.019)
Household gambles	52.044 (99.045)	41.459 (90.739)	106.579* (33.587)

Notes: All variables except household income, # persons, \$ gambling, are dummy variables. Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

**Table 25 - OLS Regressions- Household Expenditures on Alcohol from Licensed Establishments**

	NS	SASK	CAN
<b>Variable</b>			
Intercept	102.235 (165.208)	166.358 (218.993)	8.605 (65.859)
Total HH income before tax	.004** (.002)	.004 (.003)	.008* (.001)
Total HH income before tax squared	-7.427E-9 (.000)	-1.116E-8 (.000)	-1.903E-8* (.000)
Respondent age 15-24	-43.075 (133.029)	308.202** (149.559)	162.201* (54.782)
Respondent age 25-34	68.121 (65.836)	206.695** (81.843)	83.082* (27.697)
Respondent age 45-54	75.557 (67.782)	-77.909 (96.749)	-146.013* (30.381)
Respondent age 55-64	.537 (94.021)	-303.746** (128.282)	-141.181* (40.214)
Respondent age 65+	-30.232 (122.905)	-324.710*** (171.010)	-219.300* (49.695)
Respondent < 9 yrs educ	180.092 (116.940)	218.084 (179.510)	24.363 (46.229)
Respondent cert or diploma	-29.918 (55.657)	-105.846 (73.694)	-56.061** (23.927)
Respondent university educ	-61.985 (67.090)	-96.915 (95.899)	-55.736*** (28.948)
No spouse in HH	117.571*** (70.379)	57.060 (95.414)	243.515* (30.189)
Respondent & spouse work FTFY	-27.413 (78.929)	27.849 (96.519)	1.697 (32.973)
Respondent & spouse work combination FTFY-PTFY	-65.166 (74.570)	-39.811 (94.255)	-2.221 (32.469)
Total persons in HH in 1996	21.663 (31.287)	-10.543 (47.018)	16.029 (14.613)
EI recipient	6.229 (60.210)	131.157 (89.237)	91.967* (27.456)
Social assistance recipient	211.938*** (115.726)	148.008 (168.674)	43.313 (45.111)
Most income from self-emp	-62.352 (85.042)	-21.975 (112.603)	143.939* 40.732
Most income from investments		44.927 (211.154)	11.964 (84.120)
Most income from gov't transfers	-182.168*** (105.974)	-249.134 (157.891)	37.057 (46.202)
Most income from other sources	-87.149 (106.874)	-119.517 (170.387)	-26.883 (48.007)

**Table 25 - (continued)**  
**OLS Regressions- Household Expenditures on Alcohol from Licensed Establishments**

	NS	SASK	CAN
<b>Variable</b>			
One child in house	-173.595** (70.529)	-186.079*** (101.747)	-227.066* (29.959)
Two or more children in house	-119.789*** (70.566)	-296.671* (88.476)	-267.240* (29.644)
Resides in urban area > 30,000	-121.223 (73.893)	122.688 (113.918)	
Resides in rural area	-228.056* (82.066)	98.443 (143.493)	
Gov't casinos present			-51.603** (21.993)
VLT's present			31.637 (20.051)
Low Gambling Group	182.631*** (96.235)	15.886 (120.402)	-51.105 (36.384)
Middle Gambling Group	57.992 (91.072)	22.495 (110.313)	21.361 (33.521)
High Gambling Group	205.698** (101.841)	371.889* (120.497)	145.502* (38.253)

Notes: All variables except household income, # persons are dummy variables.  
Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence



**Table 26 - OLS Regressions- Household Expenditures on Food from Restaurants**

	NS	SASK	CAN
<b>Variable</b>			
Intercept	-357.878 (261.930)	-169.397 (268.898)	199.412** (94.423)
Total HH income before tax	.022* (.004)	.034* (.004)	.033* (.001)
Total HH income before tax squared	2.230E-8 (.000)	-9.300E-8* (.000)	-5.515E-8* (.000)
Respondent age 15-24	-155.627 (252.732)	299.794 (210.412)	239.419* (87.794)
Respondent age 25-34	57.368 (129.504)	361.335* (119.883)	160.296* (44.220)
Respondent age 45-54	-161.657 (125.088)	-158.354 (129.568)	-233.484* (46.604)
Respondent age 55-64	-345.514** (160.089)	-178.561 (156.784)	-327.384* (58.643)
Respondent age 65+	-416.161** (173.214)	-314.205*** (180.117)	-400.002* (64.930)
Respondent < 9 yrs educ	149.471 (143.109)	-20.505 (137.483)	-74.398 (51.525)
Respondent cert or diploma	89.096 (101.275)	16.968 (94.707)	75.339** (37.094)
Respondent university educ	156.693 (135.935)	56.362 (133.503)	150.911* (45.974)
No spouse in HH	327.255* (116.946)	112.046 (117.456)	178.833* (42.782)
Respondent & spouse work FTFY	-33.473 (156.823)	-63.002 (140.472)	-58.211 (53.536)
Respondent & spouse work combination FTFY-PTFY	266.857 (148.813)	159.654 (137.509)	14.533 (52.473)
Total persons in HH in 1996	117.481** (56.053)	105.068*** (57.851)	41.965** (20.695)
EI recipient	290.574* (107.059)	-18.120 (123.612)	-159.940* (42.767)
Social assistance recipient	97.879 (176.132)	-124.935 (161.564)	-171.206* (56.825)
Most income from self-emp	-189.750 (152.829)	169.842 (149.708)	230.206* (62.894)
Most income from investments	-416.832 (381.460)	-299.835 (253.977)	18.987 (108.512)
Most income from gov't transfers	-146.976 (160.086)	43.227 (164.414)	-13.729 (59.146)
Most income from other sources	-233.240 (169.076)	-164.023 (184.500)	-175.764* (66.271)

Table 26 - (continued)

## OLS Regressions- Household Expenditures on Food from Restaurants

	NS	SASK	CAN
Variable			
One child in house	-315.586** (143.106)	-393.620* (141.747)	-251.209* (50.890)
Two or more children in house	-382.602** (163.920)	-423.563** (172.338)	-536.771* (62.555)
Resides in urban area > 30,000	70.678 (123.622)	256.084** (125.140)	
Resides in rural area	122.056 (132.736)	47.582 (159.136)	
Gov't casinos present			-154.350* (33.041)
VLT's present			-44.426 (29.737)
Low Gambling Group	201.582 (137.921)	-76.422 (128.919)	-8.493 (48.911)
Middle Gambling Group	267.763** (121.960)	9.968 (116.709)	114.927* (43.381)
High Gambling Group	403.186* (138.279)	28.578 (130.099)	315.382* (49.145)

Notes: All variables except household income, # persons are dummy variables.

Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

\* Significant with 99% confidence

\*\* Significant with 95% confidence

\*\*\* Significant with 90 % confidence

**Table 27- OLS Regressions- Household Expenditures on Charitable Donations**

	NS	SASK	CAN
<b>Variable</b>			
Intercept	853.782 (592.662)	829.232 (926.638)	-263.488 (356.320)
Total HH income before tax	.026* (.010)	.018 (.015)	.0589* (.005)
Total HH income before tax squared	9.371E-8*** (.000)	2.08E-7** (8.0E-8)	-1.02E-7* (3.0E-8)
Respondent age 15-24	105.481 (580.378)	123.986 (752.867)	-65.226 (351.442)
Respondent age 25-34	472.608 (295.411)	-83.395 (420.667)	-140.272 (168.225)
Respondent age 45-54	392.544 (283.964)	882.974** (448.463)	324.734*** (175.258)
Respondent age 55-64	1066.085* (352.485)	-256.448 (540.711)	625.981* (219.063)
Respondent age 65+	1087.039* (382.512)	2199.824* (627.771)	1455.295* (242.834)
Respondent < 9 yrs educ	-418.207 (318.877)	-58.820 (479.908)	92.879 (189.821)
Respondent cert or diploma	196.812 (225.429)	-541.141 (328.718)	22.220 (137.893)
Respondent university educ	-35.515 (307.287)	488.457 (456.057)	222.311 (170.064)
No spouse in HH	192.339 (262.991)	85.900 (410.852)	621.359* (159.944)
Respondent & spouse work FTFY	-564.297 (354.303)	-347.876 (481.615)	-559.461* (197.568)
Respondent & spouse work combination FTFY-PTFY	104.782 (337.597)	-564.340 (473.406)	-262.618 (193.734)
Total persons in HH in 1996	-128.326 (126.391)	-256.847 (202.980)	-52.296 (78.431)
EI recipient	-8.885 (242.612)	-370.790 (432.261)	-229.961 (161.616)
Social assistance recipient	-393.435 (392.341)	171.489 (578.361)	-32.646 (218.966)
Most income from self-emp	243.221 (337.220)	1275.876** (504.089)	769.653* (233.285)
Most income from investments	2360.828* (849.622)	227.715 (854.917)	2275.343* (381.628)
Most income from gov't transfers	23.517 (352.585)	-974.080*** (576.269)	-60.861 (226.079)
Most income from other sources	415.781 (375.446)	1510.378** (631.196)	752.902* (244.881)

Table 27- (continued) OLS Regressions- Household Expenditures on Charitable Donations			
	NS	SASK	CAN
Variable			
One child in house	-111.464 (323.228)	-288.017 (498.637)	-179.485 (192.775)
Two or more children in house	98.942 (367.092)	-16.887 (595.577)	-364.806 (235.987)
Resides in urban area > 30,000	-796.175* (274.761)	646.581 (424.346)	
Resides in rural area	-520.931*** (297.801)	881.655*** (533.605)	
Gov't casinos present			-301.148** (121.844)
VLT's present			-151.575 (110.460)
Low Gambling Group	-396.645 (309.185)	-569.852 (444.059)	-528.212* (180.448)
Middle Gambling Group	-243.598 (274.457)	-175.449 (403.606)	-713.820* (160.501)
High Gambling Group	-386.321 (308.814)	-552.271 (459.976)	-738.434* (182.065)

Notes: All variables except household income, # persons are dummy variables.

Standard errors are in brackets.

Only significant coefficients are shown in full, if there are more than 3 zeros after the decimal point. Thus, some coefficients appear as .000 or -.000.

Significance levels

- \* Significant with 99% confidence
- \*\* Significant with 95% confidence
- \*\*\* Significant with 90 % confidence

Chart 1

**PERCENTAGE OF HOUSEHOLDS REPORTING EXPENDITURES ON GAMES OF  
CHANCE BY INCOME GROUP IN NOVA SCOTIA, SASKATCHEWAN AND  
CANADA**

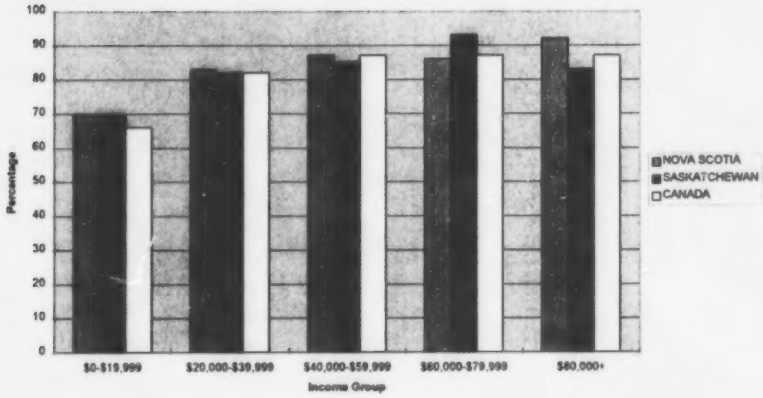


Chart 2

AVERAGE GAMBLING EXPENDITURES AS A PROPORTION OF TOTAL  
HOUSEHOLD INCOME BY INCOME GROUP IN NOVA SCOTIA, SASKATCHEWAN  
AND CANADA

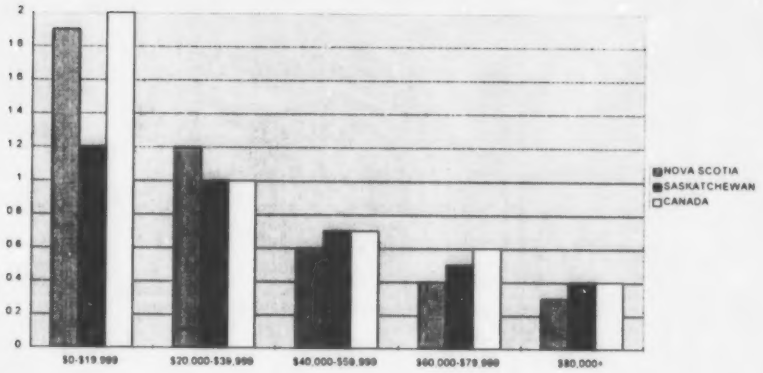
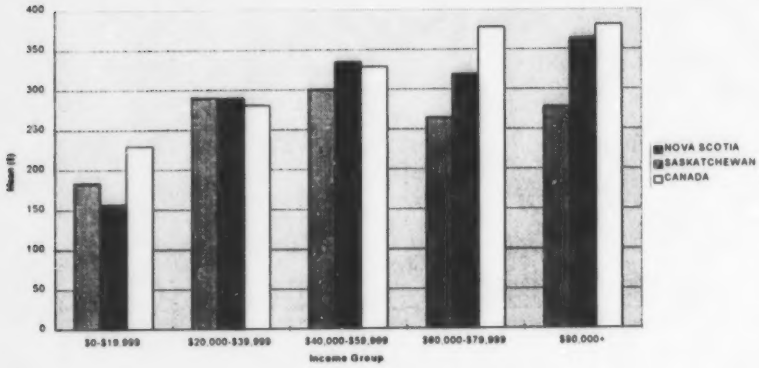


Chart 3

AVERAGE EXPENDITURES PER HOUSEHOLD ON GAMES OF CHANCE BY  
INCOME GROUP IN NOVA SCOTIA, SASKATCHEWAN AND CANADA



Selected Household Characteristics	Estimated number of households (000s)	Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines	
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	335	231	83%	149	73%	50	28%
<b>Income groups</b>							
< \$20,000	76	141	72%	84	59%	...	...
\$20,000 - \$34,999	71	240	83%	156	73%	38	22%
\$35,000 - \$49,999	66	287	84%	181	76%	60	29%
\$50,000 +	122	251	90%	167	79%	64	40%
<b>Age of reference person</b>							
18 - 44 (1)	143	201	86%	127	76%	56	34%
45 - 64	119	292	86%	206	76%	64	30%
65 and over	74	191	74%	100	59%	...	...
<b>Education</b>							
Less than high school	123	299	80%	186	71%	24	19%
High school graduation	64	257	88%	143	77%	56	33%
Postsecondary	148	164	84%	120	72%	68	33%
<b>Size of Area</b>							
Over 30,000 population	176	262	83%	160	75%	82	39%
Under 30,000 population	159	196	83%	136	70%	14	16%
<b>Fulltime earners</b>							
0	170	205	78%	118	66%	35	18%
1	115	231	87%	172	78%	63	35%
2	46	304	93%	200	83%	57	43%
3+	3	...	...	...	...	...	...
<b>Household Size</b>							
1 person	67	93	67%	59	52%	...	...
2 persons	105	254	85%	150	73%	56	26%
3 or more persons	163	273	89%	186	80%	57	36%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.



Table 28 (cont): Average household expenditure on gaming activities by selected household characteristics, Nova Scotia, 1996

Selected Household Characteristics	Bingos		Non-government lottery and raffle tickets		Winnings from games of chance (2)	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	91	15%	31	56%	(90)	38%
<b>Income groups</b>						
< \$20,000	94	15%	13	36%	(80)	33%
\$20,000 - \$34,999	145	16%	28	51%	(127)	39%
\$35,000 - \$49,999	...	...	37	63%	(91)	36%
\$50,000 +	53	14%	40	67%	(74)	42%
<b>Age of reference person</b>						
18 - 44 (1)	63	18%	31	50%	(77)	35%
45 - 64	96	13%	39	59%	(113)	43%
65 and over 65 and plus	...	...	17	43%	(78)	28%
<b>Education:</b>						
Less than high school	164	21%	23	43%	(99)	38%
High school graduation	...	...	48	65%	(65)	34%
Postsecondary	38	12%	31	62%	(93)	40%
<b>Size of Area</b>						
Over 30,000 population	78	16%	34	54%	(92)	39%
Under 30,000 population	106	15%	27	58%	(88)	37%
<b>Fulltime earners</b>						
0	123	14%	24	47%	(95)	35%
1	48	17%	38	62%	(90)	39%
2	...	...	38	74%	(79)	48%
3+	...	...	...	...	(28)	47%
<b>Household Size</b>						
1 person	...	...	11	43%	(15)	25%
2 persons	161	16%	30	54%	(143)	42%
3 or more persons	77	18%	40	63%	(87)	41%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 29: Average household expenditure on gaming activities by selected household characteristics, Saskatchewan, 1996							
Selected Household Characteristics	Estimated number of households (000s)	Games of chance expenses		Gambling-rue, pool and lottery tickets		Casinos and slot machines	
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting		
<b>Total</b>	364	256	82%	132	67%	80	28%
<b>Income groups</b>							
< \$20,000	86	134	68%	72	48%	38	15%
\$20,000 - \$34,999	83	216	80%	115	67%	37	22%
\$35,000 - \$49,999	72	292	88%	136	75%	88	33%
\$50,000 +	122	346	89%	183	75%	134	38%
<b>Age of reference person</b>							
18 - 44 (1)	150	199	85%	125	72%	59	32%
45 - 64	114	328	86%	147	73%	126	33%
65 and over	100	258	73%	124	52%	58	14%
<b>Education</b>							
Less than high school	131	269	78%	124	59%	67	21%
High school graduation	84	336	88%	210	76%	101	33%
Postsecondary	148	198	82%	94	68%	79	31%
<b>Size of Area</b>							
Over 30,000 population	186	284	86%	146	76%	103	32%
Under 30,000 population	178	227	77%	117	58%	55	23%
<b>Fulltime earners</b>							
0	163	202	75%	107	57%	47	19%
1	131	271	87%	132	72%	86	31%
2	55	362	92%	185	79%	152	43%
3+	5	...	...	...	...	...	...
<b>Household Size</b>							
1 person	91	143	70%	84	47%	29	14%
2 persons	108	271	86%	171	75%	71	30%
3 or more persons	164	308	86%	132	72%	114	34%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.  
(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 29 (cont): Average household expenditure on gaming activities by selected household characteristics, Saskatchewan, 1996

Selected Household Characteristics	Bingo		Non-government lottery and raffle tickets		Winnings from games of chance <sup>(1)</sup>	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	69	14%	47	64%	(72)	32%
<b>Income groups</b>						
< \$20,000	30	15%	14	41%	(21)	22%
\$20,000 - \$34,999	79	17%	51	61%	(69)	29%
\$35,000 - \$49,999	180	22%	46	75%	(152)	42%
\$50,000 +	...	...	68	77%	(63)	37%
<b>Age of reference person</b>						
18 - 44 (1)	28	14%	43	71%	(57)	37%
45 - 64	74	12%	69	69%	(87)	31%
65 and over 65 and plus	127	17%	27	50%	(78)	26%
<b>Education</b>						
Less than high school	113	21%	48	55%	(83)	31%
High school graduate	69	16%	61	77%	(105)	42%
Postsecondary	31	8%	38	66%	(44)	26%
<b>Sex of Area</b>						
Over 30,000 population	81	16%	37	62%	(83)	34%
Under 30,000 population	57	13%	58	67%	(61)	31%
<b>Fulltime earners</b>						
0	109	17%	22	51%	(84)	29%
1	32	12%	51	72%	(30)	30%
2	...	...	102	83%	(127)	43%
3+	...	...	...	...	(64)	51%
<b>Household Size</b>						
1 person	40	12%	21	43%	(32)	23%
2 persons	56	11%	59	66%	(86)	36%
3 or more persons	95	17%	53	74%	(86)	35%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 36: Average household expenditure on gaming activities by selected household characteristics, Canada (10 provinces), 1996						
Selected Household Characteristics	Estimated number of households (000s)	Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household
<b>Total</b>	10,901	264	81%	176	74%	60
<b>Income groups</b>						
< \$20,000	2,144	150	66%	93	59%	38
\$20,000 - \$34,999	2,193	215	80%	151	73%	35
\$35,000 - \$49,999	1,974	278	84%	188	76%	47
\$50,000 +	4,590	335	88%	221	80%	88
<b>Age of reference person</b>						
18 - 44 (1)	4,921	212	82%	139	74%	56
45 - 64	3,755	332	86%	226	80%	73
65 and over	2,223	266	72%	172	65%	47
<b>Education</b>						
Less than high school	3,292	331	79%	206	72%	67
High school graduation	2,633	306	83%	206	79%	66
Postsecondary	4,975	198	81%	139	72%	52
<b>Size of Area</b>						
Over 30,000 population	8,105	269	81%	182	75%	66
Under 30,000 population	2,795	231	82%	158	70%	44
<b>Fulltime earners</b>						
0	4,647	225	74%	147	66%	45
1	4,187	265	85%	179	77%	70
2	1,902	337	90%	224	83%	72
3+	164	505	88%	365	83%	81
<b>Household Size</b>						
1 person	2,495	186	71%	119	62%	57
2 persons	3,429	266	82%	197	75%	64
3 or more persons	4,977	288	86%	189	78%	59

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.  
(2) Lottery winnings are presented here as a negative expenditure so that net expenditure on games of chance may be calculated.

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

**Table 30 (cont): Average household expenditure on gaming activities by selected household characteristics, Canada(10 provinces), 1996**

Selected Household Characteristics	Rings		Non-government lottery and raffle tickets		Winnings from games of chance <sup>(2)</sup>	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	82	12%	27	39%	(81)	34%
<b>Income groups</b>						
< \$20,000	60	13%	7	18%	(47)	25%
\$20,000 - \$34,999	75	13%	17	30%	(62)	32%
\$35,000 - \$49,999	120	13%	25	42%	(102)	38%
\$50,000 +	80	11%	43	52%	(97)	39%
<b>Age of reference person</b>						
18 - 44 (1)	65	12%	26	42%	(73)	34%
45 - 64	93	12%	33	42%	(92)	37%
65 and over 65 and plus	105	12%	22	27%	(80)	31%
<b>Education</b>						
Less than high school	140	18%	19	30%	(101)	34%
High school graduation	95	13%	34	42%	(96)	37%
Postsecondary	38	8%	29	43%	(60)	33%
<b>Size of Area</b>						
Over 30,000 population	81	11%	27	36%	(86)	34%
Under 30,000 population	87	15%	30	49%	(68)	35%
<b>Fulltime earners</b>						
0	89	14%	18	28%	(73)	31%
1	61	10%	29	45%	(74)	36%
2	114	12%	40	50%	(113)	41%
3+	...	...	112	51%	(140)	29%
<b>Household Size</b>						
1 person	46	9%	16	25%	(52)	25%
2 persons	92	11%	27	38%	(95)	38%
3 or more persons	94	14%	33	46%	(87)	37%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 31: Average household expenditure on gaming activities by selected household characteristics, Nova Scotia, 1997

Selected Household Characteristics	Estimated number of households (000s)	Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines	
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	349	251	79%	147	66%	61	27%
<b>Income groups</b>							
< \$20,000	87	116	63%	65	49%	26	14%
\$20,000 - \$34,999	79	217	78%	146	66%	24	17%
\$35,000 - \$49,999	67	327	85%	187	72%	57	29%
\$50,000 +	116	331	89%	186	75%	115	43%
<b>Age of reference person</b>							
18 - 44 (1)	119	178	80%	113	67%	40	18%
45 - 64	94	326	79%	161	69%	50	13%
65 and over	62	199	66%	117	56%	...	...
<b>Size of Area</b>							
Over 30,000 population	190	272	81%	169	69%	72	34%
Under 30,000 population	160	226	77%	121	62%	48	19%
<b>Fulltime earners</b>							
0	174	208	71%	118	57%	35	17%
1	117	310	86%	175	73%	93	37%
2	56	257	89%	169	78%	74	37%
3+	2	...	...	...	...	...	...
<b>Household Size</b>							
1 person	75	141	64%	96	48%	34	15%
2 persons	108	257	80%	147	66%	62	26%
3 or more persons	166	296	86%	170	74%	73	33%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 31 (cont): Average household expenditure on gaming activities by selected household characteristics, Nova Scotia, 1997							
Selected Household Characteristics		Bingos		Non-government lottery and raffle tickets		Winnings from games of chance <sup>(2)</sup>	
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>		113	17%	34	49%	(105)	45%
<b>Income groups</b>							
< \$20,000		80	19%	6	23%	(62)	33%
\$20,000 - \$34,999		81	16%	45	45%	(79)	47%
\$35,000 - \$49,999		178	20%	42	57%	(137)	49%
\$50,000 +		122	13%	43	67%	(136)	51%
<b>Age of reference person</b>							
18 - 44 (1)		79	15%	25	47%	(80)	37%
45 - 64		209	20%	21	42%	(115)	36%
65 and over 65 ans et plus		87	13%	15	32%	(36)	27%
<b>Size of Area</b>							
Over 30,000 population		90	15%	41	49%	(100)	45%
Under 30,000 population		141	18%	27	49%	(111)	45%
<b>Fulltime earners</b>							
0		105	16%	27	36%	(77)	40%
1		150	20%	41	62%	(149)	52%
2		...	...	42	64%	(95)	47%
3+		...	...	...	...	(280)	67%
<b>Household Size</b>							
1 person		31	11%	28	28%	(48)	31%
2 persons		102	15%	44	49%	(97)	46%
3 or more persons		158	20%	30	59%	(136)	51%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.  
(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Selected Household Characteristics		Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines	
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>		370	81%	128	64%	149	32%
<b>Income groups</b>							
< \$20,000		78	154	59	46%	80	21%
\$20,000 - \$34,999		93	217	127	67%	79	30%
\$35,000 - \$49,999		66	275	142	82%	188	34%
\$50,000 +		132	360	164	71%	219	41%
<b>Age of reference person</b>							
18 - 44 (1)		173	235	115	66%	141	41%
45 - 64		104	341	152	73%	197	34%
65 and over		94	237	127	52%	108	15%
<b>Size of Area</b>							
Over 30,000 population		187	259	121	64%	158	32%
Under 30,000 population		183	271	136	65%	139	33%
<b>Fulltime earners</b>							
0		154	205	109	55%	100	24%
1		139	307	137	70%	186	38%
2		72	311	147	72%	189	41%
3 +		5	...	...	...	...	...
<b>Household Size</b>							
1 person		92	211	81	49%	155	26%
2 persons		125	231	137	64%	121	31%
3 or more persons		153	324	150	73%	168	37%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.



Table 22 (cont): Average household expenditure on gaming activities by selected household characteristics, Saskatchewan, 1997

Selected Household Characteristics	Bingos		Non-government lottery and raffle tickets		Winnings from games of chance <sup>(2)</sup>	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	61	12%	56	59%	(129)	39%
<b>Income groups</b>						
< \$20,000	57	15%	18	35%	(59)	27%
\$20,000 - \$34,999	84	18%	40	57%	(114)	41%
\$35,000 - \$49,999	...	...	86	61%	(191)	43%
\$50,000 +	...	...	74	74%	(150)	44%
<b>Age of reference person</b>						
18 - 44 (1)	37	11%	48	64%	(108)	42%
45 - 64	65	12%	86	65%	(159)	40%
65 and over 65 ans et plus	101	15%	35	44%	(134)	33%
<b>Size of Area</b>						
Over 30,000 population	64	9%	49	55%	(132)	37%
Under 30,000 population	58	15%	63	63%	(125)	41%
<b>Fulltime earners</b>						
0	72	16%	43	44%	(118)	34%
1	63	11%	64	67%	(143)	45%
2	...	...	69	74%	(130)	40%
3+	...	...	...	...	(40)	32%
<b>Household Size</b>						
1 person	39	12%	31	43%	(94)	29%
2 persons	50	12%	74	59%	(151)	38%
3 or more persons	83	12%	56	69%	(132)	46%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 33: Average household expenditure on gaming activities by selected household characteristics, Canada (10 Provinces), 1997						
Selected Household Characteristics	Estimated number of households (000s)	Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household
<b>Total</b>	11,086	247	77%	163	68%	78
<b>Income groups</b>						
< \$20,000	2,184	126	64%	89	56%	26
\$20,000 - \$34,999	2,331	239	76%	157	68%	61
\$35,000 - \$49,999	1,939	278	79%	182	71%	84
\$50,000 +	4,632	294	82%	192	73%	108
<b>Age of reference person</b>						
18 - 44 (1)	4,852	209	77%	130	67%	79
45 - 64	3,877	284	80%	204	73%	84
65 and over	2,354	262	71%	163	62%	65
<b>Size of Area</b>						
Over 30,000 population	8,216	247	76%	162	68%	83
Under 30,000 population	2,870	245	79%	166	69%	61
<b>Fulltime earners</b>						
0	4,682	227	71%	141	63%	67
1	4,230	248	78%	162	70%	80
2	2,021	272	86%	204	78%	88
3+	154	468	89%	309	76%	200
<b>Household Size</b>						
1 person	2,555	190	67%	111	58%	82
2 persons	3,595	284	79%	185	71%	84
3 or more persons	4,936	249	81%	173	72%	71

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 33 (cont): Average household expenditure on gaming activities by selected household characteristics, Canada (10 Provinces), 1997						
Selected Household Characteristics	Bingos		Non-government lottery and raffle tickets		Winnings from games of chance <sup>(2)</sup>	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	66	11%	31	36%	(91)	37%
<b>Income groups</b>						
< \$20,000	61	13%	8	19%	(58)	26%
\$20,000 - \$34,999	83	12%	17	29%	(81)	38%
\$35,000 - \$49,999	82	12%	30	37%	(101)	39%
\$50,000 +	54	8%	49	47%	(109)	42%
<b>Age of reference person</b>						
18 - 44 (1)	52	11%	26	39%	(78)	38%
45 - 64	71	10%	44	37%	(118)	39%
65 and over	88	12%	21	27%	(75)	33%
<b>Size of Area</b>						
Over 30,000 population	60	9%	31	32%	(89)	36%
Under 30,000 population	86	15%	31	46%	(99)	40%
<b>Fulltime earners</b>						
0	77	13%	22	27%	(80)	33%
1	62	10%	38	39%	(93)	38%
2	47	9%	39	48%	(105)	44%
3+	...	...	43	37%	(199)	59%
<b>Household Size</b>						
1 person	46	9%	17	25%	(67)	30%
2 persons	71	10%	43	35%	(100)	39%
3 or more persons	73	12%	30	42%	(98)	40%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 34: Average household expenditure on gaming activities by selected household characteristics, Atlantic Region, 1996							
Selected Household Characteristics	Estimated number of households (000s)	Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines	
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting		
<b>Total</b>	841	267	80%	152	69%	48	18%
<b>Income groups</b>							
< \$20,000	201	162	62%	68	48%	16	7%
\$20,000 - \$34,999	188	272	82%	157	70%	28	14%
\$35,000 - \$49,999	162	332	84%	168	74%	54	18%
\$50,000 +	290	299	89%	197	80%	79	28%
<b>Age of reference person</b>							
18 - 44 (1)	359	209	82%	117	71%	59	21%
45 - 64	294	352	85%	217	77%	57	21%
65 and over	188	243	68%	116	54%	14	7%
<b>Education</b>							
Less than high school	324	295	74%	161	63%	25	11%
High school graduation	176	306	83%	136	73%	74	20%
Postsecondary	341	219	84%	151	73%	56	23%
<b>Size of Area</b>							
Over 30,000 population	352	255	81%	149	72%	73	25%
Under 30,000 population	489	275	79%	154	67%	30	13%
<b>Fulltime earners</b>							
0	433	234	73%	123	60%	25	10%
1	282	263	85%	165	76%	52	24%
2	117	362	90%	214	82%	105	28%
3+	9	...	...	...	...	...	...
<b>Household Size</b>							
1 person	154	161	64%	80	48%	24	10%
2 persons	247	285	81%	164	69%	59	16%
3 or more persons	440	293	85%	170	76%	50	22%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

**Table 34 (cont): Average household expenditure on gaming activities by selected household characteristics, Atlantic Region, 1996**

Selected Household Characteristics	Bingos		Non-government lottery and raffle tickets		Winnings from games of chance (2)	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	116	20%	28	51%	(77)	36%
<b>Income groups</b>						
< \$20,000	121	19%	10	27%	(53)	25%
\$20,000 - \$34,999	154	22%	24	47%	(92)	40%
\$35,000 - \$49,999	165	23%	27	56%	(82)	37%
\$50,000 +	60	17%	43	67%	(81)	40%
<b>Age of reference person</b>						
18 - 44 (1)	73	21%	26	54%	(66)	35%
45 - 64	144	20%	35	56%	(101)	42%
65 and over 65 ans et plus	153	16%	21	38%	(61)	28%
<b>Education</b>						
Less than high school	174	24%	19	37%	(84)	34%
High school graduation	126	21%	33	57%	(63)	35%
Postsecondary	55	14%	33	61%	(77)	39%
<b>Size of Area</b>						
Over 30,000 population	81	15%	30	50%	(78)	35%
Under 30,000 population	141	22%	26	52%	(76)	37%
<b>Fulltime earners</b>						
0	132	20%	20	39%	(66)	31%
1	102	19%	33	61%	(89)	39%
2	82	18%	41	69%	(80)	46%
3+	...	...	...	...	(171)	61%
<b>Household Size</b>						
1 person	83	12%	13	38%	(39)	24%
2 persons	124	18%	29	48%	(90)	38%
3 or more persons	123	23%	33	57%	(83)	40%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 35: Average household expenditure on gaming activities by selected household characteristics, Prairies Region, 1996						
Selected Household Characteristics	Estimated number of households (000s)	Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	
<b>Total</b>	1,751	295	82%	144	69%	99
<b>Income groups</b>						
< \$20,000	312	135	68%	68	52%	41
\$20,000 - \$34,999	343	238	80%	111	66%	62
\$35,000 - \$49,999	345	352	86%	180	75%	55
\$50,000 +	750	361	88%	174	75%	159
<b>Age of reference person</b>						
18 - 44 (1)	818	227	86%	115	72%	93
45 - 64	563	403	86%	192	76%	131
65 and over	370	280	70%	135	52%	61
<b>Education</b>						
Less than high school	489	443	79%	166	65%	141
High school graduation	393	290	85%	177	74%	111
Postsecondary	869	214	84%	117	69%	69
<b>Size of Area</b>						
Over 30,000 population	1,197	286	83%	150	72%	104
Under 30,000 population	554	315	82%	132	64%	86
<b>Fulltime earners</b>						
0	626	252	75%	118	59%	56
1	764	303	86%	139	73%	123
2	328	361	90%	196	80%	127
3+	33	265	76%	...	...	...
<b>Household Size</b>						
1 person	380	166	73%	103	55%	38
2 persons	537	362	85%	178	72%	97
3 or more persons	834	310	85%	141	73%	127

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

**Table 35 (cont): Average household expenditure on gaming activities by selected household characteristics, Prairies Region, 1996**

Selected Household Characteristics	Bingos		Non-government lottery and raffle tickets		Winnings from games of chance (2)	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	117	15%	44	57%	(109)	34%
<b>Income groups</b>						
< \$20,000	77	15%	10	30%	(60)	22%
\$20,000 - \$34,999	123	18%	38	50%	(97)	31%
\$35,000 - \$49,999	191	18%	43	58%	(118)	37%
\$50,000 +	96	13%	62	70%	(130)	39%
<b>Age of reference person</b>						
18 - 44 (1)	75	15%	41	63%	(96)	36%
45 - 64	158	15%	60	58%	(139)	35%
65 and over 65 ans et plus	146	16%	28	40%	(90)	27%
<b>Education</b>						
Less than high school	262	25%	39	48%	(165)	34%
High school graduation	67	15%	56	60%	(120)	36%
Postsecondary	58	9%	42	60%	(72)	33%
<b>Size of Area</b>						
Over 30,000 population	117	14%	41	53%	(126)	35%
Under 30,000 population	116	17%	52	64%	(71)	31%
<b>Fulltime earners</b>						
0	154	19%	32	45%	(107)	29%
1	103	13%	43	61%	(105)	35%
2	85	13%	65	67%	(111)	39%
3+	...	...	...	...	(197)	35%
<b>Household Size</b>						
1 person	37	10%	29	42%	(41)	27%
2 persons	191	16%	52	57%	(155)	35%
3 or more persons	105	17%	46	63%	(109)	36%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

Table 36: Average household expenditure on gaming activities by selected household characteristics, Atlantic Region, 1997						
Selected Household Characteristics	Estimated number of households (000's)	Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	
<b>Total</b>	862	241	78%	140	65%	45
<b>Income groups</b>						
< \$20,000	215	116	62%	60	48%	17
\$20,000 - \$34,999	204	236	77%	142	65%	22
\$35,000 - \$49,999	173	313	85%	186	73%	46
\$50,000 +	271	299	86%	172	74%	83
<b>Age of reference person</b>						
18 - 44 (1)	365	184	80%	116	67%	49
45 - 64	308	324	81%	178	70%	53
65 and over	189	216	66%	124	55%	24
<b>Size of Area</b>						
Over 30,000 population	375	254	80%	154	68%	58
Under 30,000 population	487	231	76%	129	63%	35
<b>Fulltime earners</b>						
0	447	217	71%	116	58%	30
1	265	274	84%	166	72%	59
2	124	244	87%	158	75%	61
3+	6	...	...	...	...	...
<b>Household Size</b>						
1 person	164	133	62%	85	49%	25
2 persons	267	257	78%	147	65%	45
3 or more persons	430	272	83%	156	71%	52

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.



**Table 36 (cont): Average household expenditure on gaming activities by selected household characteristics, Atlantic Region, 1997**

Selected Household Characteristics	Bingos		Non-government lottery and raffle tickets		Winnings from games of chance <sup>(2)</sup>	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	118	17%	31	46%	(92)	39%
<b>Income groups</b>						
< \$20,000	76	18%	8	24%	(46)	26%
\$20,000 - \$34,999	128	20%	30	41%	(86)	41%
\$35,000 - \$49,999	170	20%	40	54%	(128)	45%
\$50,000 +	110	13%	44	62%	(110)	44%
<b>Age of reference person</b>						
18 - 44 (1)	80	17%	35	52%	(95)	41%
45 - 64	172	20%	35	48%	(114)	43%
65 and over 65 ans et plus	102	14%	16	31%	(50)	31%
<b>Size of Area</b>						
Over 30,000 population	98	14%	38	48%	(92)	41%
Under 30,000 population	133	20%	26	44%	(92)	38%
<b>Fulltime earners</b>						
0	124	19%	23	36%	(76)	35%
1	126	18%	37	56%	(113)	44%
2	79	11%	43	59%	(98)	42%
3+	...	...	...	...	(120)	46%
<b>Household Size</b>						
1 person	46	11%	20	29%	(42)	27%
2 persons	120	17%	33	44%	(89)	38%
3 or more persons	144	20%	34	54%	(113)	44%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

**Table 37: Average household expenditure on gaming activities by selected household characteristics, Prairie Region, 1997**

Selected Household Characteristics	Estimated number of households (000s)	Games of chance expenses		Government-run pool and lottery tickets		Casinos and slot machines	
		Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	1,785	265	76%	128	62%	123	25%
<b>Income groups</b>							
< \$20,000	328	137	59%	58	44%	46	15%
\$20,000 - \$34,999	368	233	76%	110	61%	112	24%
\$35,000 - \$49,999	332	285	77%	139	64%	129	28%
\$50,000 +	757	327	84%	163	70%	159	29%
<b>Age of reference person</b>							
18 - 44 (1)	840	218	77%	105	62%	121	29%
45 - 64	561	332	81%	169	68%	146	26%
65 and over	383	269	68%	120	54%	93	16%
<b>Size of Area</b>							
Over 30,000 population	1,214	256	76%	129	64%	119	24%
Under 30,000 population	571	283	77%	127	59%	132	27%
<b>Fulltime earners</b>							
0	677	237	69%	109	54%	92	20%
1	726	276	78%	128	64%	142	27%
2	350	285	85%	158	73%	135	31%
3+	31	395	89%	222	78%	...	...
<b>Household Size</b>							
1 person	398	172	65%	74	49%	90	21%
2 persons	572	292	79%	150	65%	121	27%
3 or more persons	815	291	80%	139	67%	140	26%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.

**Table 37 (cont): Average household expenditure on gaming activities by selected household characteristics, Prairie Region, 1997**

Selected Household Characteristics	Bingos		Non-government lottery and raffle tickets		Winnings from games of chance <sup>(2)</sup>	
	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting	Average Expenditure per household	Percentage reporting
<b>Total</b>	91	13%	40	49%	(118)	38%
<b>Income groups</b>						
< \$20,000	77	13%	12	28%	(56)	24%
\$20,000 - \$34,999	95	17%	28	43%	(110)	39%
\$35,000 - \$49,999	123	14%	48	50%	(155)	41%
\$50,000 +	82	10%	56	60%	(133)	43%
<b>Age of reference person</b>						
18 - 44 (1)	60	12%	35	51%	(103)	40%
45 - 64	117	13%	53	52%	(153)	41%
65 and over	123	14%	33	38%	(100)	31%
<b>Size of Area</b>						
Over 30,000 population	92	12%	36	45%	(119)	38%
Under 30,000 population	91	15%	49	57%	(116)	39%
<b>Fulltime earners</b>						
0	103	15%	30	37%	(98)	33%
1	94	13%	43	53%	(132)	40%
2	65	8%	52	61%	(126)	45%
3+	...	...	57	50%	(149)	54%
<b>Household Size</b>						
1 person	54	9%	24	37%	(70)	27%
2 persons	105	14%	48	50%	(133)	40%
3 or more persons	100	14%	43	54%	(131)	43%

(1) Persons 18 and over were selected as this is the legal age of gambling in most provinces.

(2) Lottery winnings are presented here as a negative expenditure so that net expenditures on games of chance may be calculated.



# Appendix E

**Youth Gambling: An Exploration of Participation,  
Perceptions & Potential Influences**

**Nova Scotia Alcohol and Gaming Authority  
September, 1999**

# TABLE OF CONTENTS

Introduction .....	Page 1
Methodology .....	Page 4
Findings .....	Page 6
Definitions Of Gambling .....	Page 6
Perceptions Og Gambling As Risk-Taking .....	Page 7
Perceived Gambling Activities & Reasons For Involvement .....	Page 11
Perceived Reasons For Gambling .....	Page 16
Participation And Access To Gambling Activities .....	Page 18
Potential Influences On Youth Gambling .....	Page 22
Discussion .....	Page 39
Bibliography .....	Page 44
Appendices .....	Page 46

## List Of Tables And Figures

Table 1: Perceived Risk Taking Activities By Group .....	Page 8
Table 2: "Unaided" Perceived Gambling Activities By Group ..	Page 12
Table 3: 'Top Of Mind' Reactions To A Lotto Advertisement ..	Page 26
Figure 1: Lottery Promotion (Illustration Only) .....	Page 31



## INTRODUCTION

Most research on adolescent gambling has examined prevalence rates of gambling and problem gambling among youth. These studies have shown that gambling is commonplace and that adolescents are at risk for developing gambling problems (Addictions Foundation of Manitoba, 1999; Ladouceur & Dubé, 1994; Wynne Resources, 1996).

Nova Scotia is not an exception to the trend. In 1993, *Omnifacts Research* found that 61 per cent of adolescents in Nova Scotia had gambled at some point, 9 per cent were considered 'at risk for problems,' and a further 3 per cent displayed signs of problem gambling (Omnifacts Research Ltd, 1993).<sup>1</sup> The *Nova Scotia Student Drug Use 1996* survey of 3,790 students in grades seven, nine, ten and twelve showed that 68 per cent of students had gambled previously, and 32 per cent did so monthly. Moreover, 2 per cent reported a desire to stop gambling, but did not think they could (Nova Scotia Department of Health and Dalhousie University, 1996).

Just a handful of studies has further explored factors associated with youth gambling. For example, Gupta and Derevensky (1997) found among 479 children aged nine to fourteen, that 81 per cent who had gambled, had done so with family members. They aptly noted that although gambling can have serious consequences for adolescents, parents often sanction the behaviour. They further argue that little is being done to address issues surrounding adolescent gambling<sup>2</sup>.

---

1 We note that this study was criticized for altering the SOGS. Stinchfield, Cassuto, Winters and Latimer (1997) have also questioned the representativeness of youth completing these surveys, since those who do not give consent or do not have parental consent are excluded from participation.

2 Drug Dependency Services, Nova Scotia Department of Health and the Nova Scotia Department of Education and Culture have initiated a curriculum supplement designed to make youth in Nova Scotia aware of issues surrounding gambling.



Nevertheless, to design effective interventions we need a firm understanding of the perceptions and motivations underlying youth gambling. This means – in part – approaching gambling from the adolescents' point of view. Boutilier (1997) took this approach in residential Metropolitan Halifax and found that the teens held diverse perceptions and attitudes about gambling mediated by factors such as level of involvement, type of activity, and advertising.

Researchers from the Nova Scotia Alcohol and Gaming Authority initiated this study as a result of research questions that emerged from Boutilier's (1997) and Gupta and Derevensky's (1997) work. The goals of the study were to:

- 1) Explore youth definitions of gambling;
- 2) Examine perceptions of gambling in the context of other perceived adolescent risk behaviours;
- 3) Probe participation in gambling among youth, and factors that might influence participation;
- 4) Examine recall and perceptions of gambling advertising and promotions.

To achieve these objectives, we conducted twelve focus groups with students from grades seven, nine, and eleven in Metropolitan Halifax (urban), and Liverpool, Nova Scotia (rural).

Focus groups can provide rich detailed information that we cannot obtain using quantitative methods such as surveys. However, without triangulating the findings with other methods, confirming hypotheses or making inferences to the larger population can lead to faulty

conclusions. We also encountered some peer pressure in the groups that may have altered the findings. We therefore caution that the results are considered exploratory until matched with findings from other studies.

## METHODOLOGY

Researchers from the Alcohol and Gaming Authority conducted twelve focus groups with youth between 18 August 1999 and 25 August 1999. Each focus group consisted of a trained moderator and six to twelve participants. The moderator introduced each topic and facilitated the discussion until the group had exhausted it. All of the focus groups were audio-taped, and the tapes were transcribed verbatim. The moderator undertook the analysis by reading the transcripts and examining them for trends and deviations in the groups.

Groups were segmented by age, gender, and urban versus rural. Focus groups provide optimum results when participants are comfortable and attentive to the topic of discussion. Mixing ages and genders among groups of adolescents could lead to role playing that otherwise may not occur. The groups were also extended to include adolescents from urban and rural areas to explore any differences between the regions.

*Centrafax Services Limited* recruited the participants from local phone directories. Each participant *and* their parent or guardian had to sign a notice of informed consent before being allowed to attend the group sessions. Only one instance occurred where this presented a problem.<sup>3</sup> Samples of the recruiting screener, parental letters, and letters of informed consent are in the Appendices. The urban groups were held at a focus group facility in Metropolitan Halifax, and the

---

3. After Centrafax recruited one participant, we discovered from the guardian that the group discussion may have lead to psychological harm. We gave the individual the promised honorarium and said that we had recruited too many people for the group.

rural groups were conducted in a conference facility at *White Point Lodge* near Liverpool, Nova Scotia.

The following table provides the breakdown of each group's participation.

	Halifax						Liverpool					
	Girls			Boys			Girls			Boys		
Grade	7	9	11	7	9	11	7	9	11	7	9	11
# People	10	11	6	9	8	6	10	11	10	11	10	7

The Metropolitan Halifax groups were more socioeconomically and racially diverse than the groups from Liverpool, which was anticipated. While the groups appeared typical of a cross section of youth from these regions, there is no way of accurately confirming this.

One limitation of focus groups is that they possess a high degree of artificiality, which may lead participants to act differently than they would among friends or acquaintances. In a few of the groups, peer pressure appears to have led to role playing. This appeared particularly acute among grade seven boys from Halifax. A peer effect was less noticeable in the other groups, but may have still affected the discussion.

Finally, while we examined advertising and a lottery promotion in the groups, we caution that focus groups cannot be used to determine the *impact* of advertising and promotions on youth.

## FINDINGS

### DEFINITIONS OF GAMBLING

Each group of participants was asked to individually write down what gambling meant to them. Two distinctions were observed in their definitions. One set of interpretations involved the *consequences* of gambling while the other referred to the *act* of gambling.

Excepting *urban grade seven boys*, *younger participants* were most likely to mention consequences in their definitions of gambling, which generally comprised losing monies. For instance, most urban grade seven girls thought of gambling as "wasting money." The rural group of grade seven girls agreed with one participant who felt it was a "waste of money if you don't win." A girl in this latter group also concluded that it was a waste of money even if you did win, "because you probably won't win as much as you have spent." The group of rural grade seven boys felt that gambling was "wasting money on machines." The "machines" they referred to were slot machines and VLTs. Just six participants across the four grade nine groups thought of gambling as "losing money," "blowing money," or "pointless," and none of the grade eleven participants considered gambling losses in their definitions.

Definitions of gambling provided by the urban grade seven boys, and all grade nine and grade eleven participants were more diverse. Common themes across these groups were "betting money," taking "risks" or "chances," and "trying to win" or "get ahead." Other definitional references mentioned by a few participants were "possessions," "fun," "entertainment," "passing time," "luck," and "skill." Two urban grade seven boys, who defined gambling as involving skill, discussed a television commercial they had seen, which they thought showed them how to win while playing VLTs. One boy commented, "That book rules!" In fact, the commercial is a promotion for a video that purports to show how to win at slot machines. Participants across the groups widely recognized this commercial when discussing advertising, a point to which we will return.

Differences in definitions by age, gender, and region were also observed. For instance, female participants mentioned wagering possessions – despite age – whereas only urban grade eleven males thought this way. The female participants were also more apt to include the term "addiction" in their definitions of gambling. Overall however, this concept was noted as a definition of gambling solely among urban grade nine boys, and rural girls from grades seven and nine. Although few participants recognized the concept of "addiction" in their definitions of gambling, a majority mentioned it as a *reason* for gambling.

### PERCEPTIONS OF GAMBLING AS RISK-TAKING

To learn how youth perceive gambling compared with other adolescent risk-taking behaviours, the participants were asked to describe activities they perceived as potentially dangerous for themselves or others around them. It was emphasized that they need not have engaged in these activities themselves. However, they had to have seen or heard of others their age involved in the activity. Table 1. below, shows the results by group.

Adolescents across the groups recognized drug use and drinking as possibly harmful. Region, age, and gender specified perceptions of other risk behaviours. While these findings are interesting, the intent was to learn how gambling corresponds with adolescents' thoughts on risk-taking activities. Since just one person across the groups thought of gambling as potentially harmful *for them or others their age*, we explored reasons why gambling was not considered alongside other risk-taking activities. Several reasons emerged from the discussion, and all centered on the theme that gambling does not hold potential harm for adolescents.

**Table 1. Perceived Risk-Taking Activities by Group**

Perceived or Observed Risk-Taking Activities	Discussed in Group:			
	Urban Girls	Urban Boys	Rural Girls	Rural Boys
Drug Use	①②③	④⑤⑥	①②③	④⑤
Smoking	① ③		①	④ ⑥
Drinking	①②③		①②③	④⑤⑥
Fighting	① ③	⑥	①②③	④⑤⑥
Weapons		④⑤⑥	②	
'Unprotected' Sexual Activity / Sexual Diseases		④⑤	②③	⑤⑥
Speeding/Dangerous Driving	①	④⑤⑥	③	⑤⑥
Driving Under Influence of Alcohol	③		② ③	⑤
Theft, Break and Enter (Other Illegal Activities)		④ ⑥		⑥
Gangs, 'Thugs,' 'Psycho's'		④⑤		

① Grade 7 Girls (Halifax)

② Grade 9 Girls (Halifax)

③ Grade 11 Girls (Halifax)

④ Grade 7 Boys (Halifax)

⑤ Grade 9 Boys (Halifax)

⑥ Grade 11 Boys (Halifax)

① Grade 7 Girls (Liverpool)

② Grade 9 Girls (Liverpool)

③ Grade 11 Girls (Liverpool)

④ Grade 7 Boys (Liverpool)

⑤ Grade 9 Boys (Liverpool)

⑥ Grade 11 Boys (Liverpool)

To begin with, the participants did not think of their specific betting activities as leading to harm:

[Moderator] "We were talking about gambling earlier, and we were also talking about things that are potentially harmful, and betting didn't come up. So I'm just curious why it didn't come up?" Grade 7 Boy: "It's not harmful to us." [Another] "Because it ain't harmful unless you're addicted." Grade 9 Boy: "Like most of it's for fun. When we gamble, it's just among our friends so it's not really a big deal. You'll go to school and play dice or whatever. You won't really get into anything big." [Another] "We can't at our age gamble that much so we really don't think of it as much of a problem." Grade 7 Girl: "Well with gambling, you don't really think of betting first. You know like slot machines, and stuff." Grade 9 Girl: "No one really does any, well, no kids do heavy-duty gambling, like, that we see." Grade 11 Girl: "When we think of gambling, the first thing we think of is scratch tickets or going to the casino or something. You wouldn't think of betting and losing a bet and having to pay somebody. Like that risk wouldn't come to mind as soon as all the rest." Grade 11 Boy: "We play cards for, you know, a dollar or 25 cents and stuff, that's more like us. [But] if you're in a high-stakes poker game, you know, you might get up and get in a fight or something like that."

Although many of the participants acknowledged that gambling can become "addictive," they did not have any sense that their own betting activities could get out of control. When harm from gambling was considered, it consisted of getting beaten up over gambling debts. Furthermore, the participants appeared to think of problem gambling as an "older person's" problem:



Grade 9 Girl: "We really have nothing to lose because we can't bet our house. The only thing we can lose is money, which is no big deal because we can just get it back from our parents. It's not like we've got to pay for anything. We don't pay the electricity bill or the telephone bill." [Another] "I think it's more of a problem when you're on your own." [Another] "Yeah, when you move away from home, and like, you have kids." [Another] "The only thing that would be risky is if our parents gambled away all of the money and the house and stuff." Grade 7 Boy: "It's not as harmful for us as it is for adults." [Another] "Not unless you're an adult and you owe this dealer guy thousands of dollars and he wants to break off your legs or something." Grade 9 Boy: "A guy in Brazil bet his new bike during the World Cup and lost, so he shot himself, so that can be potentially dangerous."

The last reason among some of the participants for not including betting as a risk activity was that the participants did not perceive it as "life threatening," or comprising physical harm.

Grade 9 Girl: "[Gambling] can't physically hurt you. Unless you gamble your life, which would be really stupid." Grade 11 Boy: "You could have saved money up for something and blown it." [Another] "Or, you could hurt your family or lose your family." [Another] "Have to steal money to gamble."

We also found that urban grade nine girls did not view *cigarette smoking* as potentially life threatening, at least when first starting out. Participants in five of the twelve groups considered smoking as hazardous. Despite this, we observed some participants from *all of the groups* smoking cigarettes before entering the area where we held the discussion. After probing one group, we found that some grade nine girls perceived smoking to be risky, but only after a time:

Grade 9 Girl: "That doesn't seem as dangerous as [all of the other things]." [Another] Yeah. It's not risky right away. It's just risky after a while." [Another] Once you get cancer from it, then it's a bit risky." [Moderator] So it's not risky right away? [Another] "No, not really. Unless you consider, like, yellow teeth, risky or something."

This forecast for smokers may be illustrative of adolescent perceptions of gambling problems. *They do not feel that it applies to them*, unless someone in their immediate family develops a gambling problem. We feel these perceptions are the result of two factors. First, they did not appear to know of anyone their age who has developed a gambling problem, and media representations of problem gamblers have not focused on children with such problems. We surmise that this makes 'the problem' extraneous to youth. Furthermore, gambling "addicts" discussed in the groups were adults, involved in "adult games" like slot machines and VLTs. As shown below, the youths claimed little or no access to these forms of gambling. They also did not appear to foresee any possibility of developing problems until such time as they do have access.

## **PERCEIVED GAMBLING ACTIVITIES & REASONS FOR INVOLVEMENT**

### **Gambling Activities**

Each group was asked, without prompting, what types of things they would include as gambling activities. Table 2, below, shows that the activities mentioned most frequently were card games for money, slot machines, lottery tickets, sports betting/sports pools, horse racing, and 'simple bets.' The latter typically comprised some form of a dare along with a small wager.

Overall, the participants did not think as often of casino table games, dice games for money, tossing coins at a wall, betting on school fights, VLTs, bingo, and raffles.

**Table 2. "Unaided" Perceived Gambling Activities by Group**

Perceived Gambling Activities Discussed in Group:	Urban Girls	Urban Boys	Rural Girls	Rural Boys
Lottery Tickets (Online, Instant)	①②③	⑥	①②③	④⑤⑥
Card Games for Money.	① ③	④⑤⑥	①②③	④⑤⑥
Casino Table Games		④⑤⑥		
Casino Slot Machines	②③	④⑤⑥	①②③	④⑤⑥
VLTs		④	③	
Betting on Animals	①②③	⑤	②③	④
Bingo	①②		③	
Sports Pools / Sports Betting	③	⑤⑥	①②③	④⑤⑥
Dice Games for Money	②	⑥	③	
Tossing Coins at Wall		④ ⑥		
Raffles	②③	⑤		
Betting on Fights at School	①		③	④
'Simple Bets / Dare Bets'	②③	⑤⑥	①②	③

- ① Grade 7 Girls (Halifax)  
 ② Grade 9 Girls (Halifax)  
 ③ Grade 11 Girls (Halifax)

- ④ Grade 7 Boys (Halifax)  
 ⑤ Grade 9 Boys (Halifax)  
 ⑥ Grade 11 Boys (Halifax)

- ① Grade 7 Girls (Liverpool)  
 ② Grade 9 Girls (Liverpool)  
 ③ Grade 11 Girls (Liverpool)

- ④ Grade 7 Boys (Liverpool)  
 ⑤ Grade 9 Boys (Liverpool)  
 ⑥ Grade 11 Boys (Liverpool)

We can only speculate about the reasons for this divergence. One plausible explanation is that activities the participants had been involved in, or observed, came to mind more readily. Our sense from all of the groups was that the youth were not heavily engaged in gambling activities. When we compared activities that they defined as gambling with self-reported occasions of gambling, overlap was found with scratch tickets, cards for money, sports pools, and 'simple bets.' Most participants who defined these activities as gambling had either participated or observed others of their own age engaged in the behaviour. Still, urban grade seven and grade nine boys who had played scratch tickets did not consider it gambling: Many of the participants felt that they would either win back their own money, or would not really lose money since they paid for the game before determining the outcome. Despite the fact lottery tickets are also purchased before knowing the outcome, they felt this was winning "others'" monies.

Grade 7 Boy: "You're just [playing scratch tickets] to win money, yourself. Well, it's not someone else's money that your winning. I think slot machines are different because everybody's money is going into the slot machines and stuff, and you're just like, winning other people's money." [About half of the group agrees] Grade 9 Boy: "Bingo is the same as the scratch and win things. You're not going to lose money if you lose. You paid for it up front." [Another] "Yeah, but like betting on sports and things, you bet certain odds and you either win, or you pay if you don't get the team you bet on."

Participation or observation may be a determinant in defining an activity as gambling. However, neither appears necessary nor sufficient in the definitional process. For example, grade seven urban and rural boys reported betting on fights, *but did not think of it as gambling*, because they were unsure of their ability to collect their winnings. This is compared with grade eleven rural girls and boys who *also participated in these*

*activities and decided it was gambling, despite difficulties in collecting their wagers.*

A second, equally plausible, explanation for the disparity in the results is that society divides gambling into distinct levels, ranging from socially acceptable to socially deviant. Under this premise, people conceive of the socially acceptable forms of gambling as constituting a lesser form of "gambling" than socially deviant forms. Furthermore, individuals are socialized from a young age to recognize accepted types of gambling as somehow different from disdained types. This hypothesis can be illustrated with bingo, raffles, and lottery tickets as examples. Boutilier (1997) observed in three teen focus groups held in Halifax in 1997, that most of the teens considered bingo and raffle tickets to be entertainment first, and then gambling. In this study, three of twelve groups thought, *unprompted*, of bingo and raffles as gambling. Even so, most of the participants across the groups did not think of bingo or raffles as a "pure" form of gambling.

Grade 9 Girl: "Bingo is different. When you go to, like the old ladies go to bingo at the fire hall, that's not exactly risking or betting money or valuables. It's like using money to buy the thing you're betting on." [Another] "Well you can get addicted to it, but it's more entertainment than anything." [Another] "It's kind of more for entertainment for most people now." Grade 7 Boy: "Bingo is not really gambling because most people win." Grade 11 Boy: "See, you're buying the cards and you're taking a chance to win, so it's kind of a card game." [Another] "It's really social and really common." [Another] "You don't think about people having problems and playing bingo." [Another] "It's definitely more entertainment than gambling, but it's still a form of gambling. If it was real gambling, they'd have like casinos at churches and stuff."

When probed about raffles in the groups, the participants claimed that while it is technically gambling, it is also different from gambling since charitable organizations receive the monies. The notion of "innocent" betting also arose in some of the groups. In essence, "innocent bets" were

contingent on the activity, the amount of money placed at risk, and how serious people were about winning. Most youths considered bingo, raffle tickets, and 'simple bets' to be harmless. Still, a handful of participants across the groups thought that any of the activities were precarious if pursued to the extreme.

The high unprompted awareness of slot machines and low awareness of casino table games and VLTs leads us to further question the manner by which youth define gambling. Casino and Video Lottery gambling have been controversial since they were introduced in Nova Scotia. Still, eleven of twelve groups immediately thought of slot machines as gambling, but just two groups considered VLTs. Why the difference in unprompted perceptions, given that access is restricted to both forms of gaming and both have consistently been in the media? We surmise that it may be the result of advertising that is reinforcing a societal definition of gambling.

Every group displayed high 'unaided recall' of a television advertisement for a video that alleges to teach the viewer how to win at slot machines. Additionally, many of the participants recalled television and billboard advertising for the casino in Halifax. It is possible that these messages provided them with 'top of mind' recall about slot machines, augmenting a societal definition of these machines as gambling devices. Although VLTs have a history of controversial *news* media coverage, youth may not have been as exposed, leaving them without 'top of mind' recall. We did observe that the participants thought of VLTs as gambling devices *once they were prompted*. Still, a few of the younger participants did not know what a VLT was, and all knew what a slot machine was, which supports a communications thesis.

In short, we can only speculate why some forms of gambling were recalled unaided while others were not. We feel that the most plausible explanations include personal or social network participation, societal definitions, and advertising and other communications.

## PERCEIVED REASONS FOR GAMBLING

None of the participants seemed to give much thought to reasons for gambling. This was likely a result of the way in which we worded the question. We asked why they thought people (overall) gambled, instead of directing it at them, and then at adults. The reasons most frequently mentioned included: the result of addiction, to win money, for fun and excitement/entertainment, and to pass time or out of boredom.

Excluding urban grade eleven boys, at least one person in each group *mentioned* addiction as a reason for engaging in gambling. Nonetheless, it was *not a topic for discussion* among urban and rural boys, or urban and rural grade eleven girls. The following excerpt is demonstrative of how most of the urban grade eleven boys felt about problem gambling:

Grade 11 Boy: "The thing is, if you start gambling, the consequences aren't nearly as bad. When you get caught drunken driving, chances are you've had an accident or you just got pulled over." [Another] "And if you have your graduated license, it's revoked for life. There's a good chance you're going to hurt somebody. That's not usually what happens when you're gambling." [Another] "If you become addicted to gambling, you can cause some serious problems with family or friends." [Another] "Not really. My Uncle was addicted to VLTs and he just stopped. He has to go to Gambler's Anonymous and stuff, but it didn't really cause a problem. Like he didn't spend his paychecks. Some people do." [Another] "I want to know what's so addictive about VLTs, because apparently they're the worst. I don't understand that."

This notion that gambling would probably not have any dire consequences was also found for specific activities. Many of the participants thought it would be impossible to incur harm by purchasing scratch tickets. An urban grade seven girl concluded that the worst thing that could possibly happen would be a paper cut.

Few participants displayed any knowledge of gambling problems, even among the groups where they discussed problem gambling. For instance, about half of the participants who mentioned gambling problems felt that it occurred among people who are poor, a result of their trying to win money. The following comments from the rural group of grade nine girls further illustrate a lack of understanding of gambling problems:

Grade 9 Girl: "There's this one guy. He buys like, tons of scratch tickets, he's compulsive. He's at the store at 12:00. No he's there at 9:00, 12:00, and 4:00. And then he's got another store that he goes to, I don't know, every hour on the hour. But he's got lots of money so he's not like. . . [Another] "He's got lot's of money so he's not poor. So he just keeps buying and buying the tickets, hoping to win some day, a lot of money."

The term "addicted" did not arise in discussion of this fifty-year-old man, who apparently buys scratch tickets "compulsively." However, these same girls claimed they knew people who were "addicted" to bingo, because they were attending every night. Additionally, neither was considered to be as big a problem as "the stuff that happens in the casino." Overall, the participants cited slot machines most often as what "addicted" gamblers' play. VLTs, along with bingo were mentioned sporadically.

The second most frequent reason for gambling according to the participants was to "win money," which they closely tied to fun and excitement / entertainment. That is, it was fun *if* you were winning. Only rural grade nine and grade eleven girls *did not* mention winning money as a reason for gambling. Also, we found that urban grade eleven boys thought gambling was a "*good way to make money.*"

Apart from urban grade seven and grade nine girls, the participants generally agreed that gambling was good for passing time, or was something people did if they were bored. This makes sense, when we consider that many of the participants engaged in card games at school (sometimes with betting involved) to pass time.



The only other reasons for gambling singled out by one to two participants were to alleviate depression (an urban grade seven girl) and to attempt to get out of debt or out of a rut (two urban grade eleven girls).

## PARTICIPATION AND ACCESS TO GAMBLING ACTIVITIES

Participants in each group were asked what types of gambling activities they or people their age engaged in. Nearly all reported having played scratch tickets, but most had done so rarely or occasionally. The most common way that they obtained scratch tickets was from their parents or extended family as gifts or on special occasions:

Grade 7 Girl: "I don't know very many teenagers that do that stuff. It's more based on like the parents just buying it for the kids every now and then for, like, a birthday or something, or a special occasion." Grade 11 Boy: "I don't know of anyone who hasn't received them in their stockings for Christmas." Grade 9 Girl: "It's just that extra something. They're not really a big deal, like I don't think I've ever heard of anyone getting addicted to scratch tickets." Grade 7 Girl: "If [my parents] get two, they let me scratch one. But if they win any money, it's theirs."

We also found several participants in the urban groups who claimed that *they had* purchased scratch tickets:

Grade 7 Girl: "Yeah, there's one store where I've bought them. They sell kids cigarettes too. They don't care, they just want the money." Grade 7 Boy: "Pretty much everyone has bought a scratch ticket. I don't think there is no one in the world who hasn't." Grade 9 Girl: "If you can scratch your nail, you can buy them." Grade 11 Boy: "It's kind of like, when you're buying something else at the grocery store, you see them, like, right there because they're always right by the register, and you just get one. A lot of places aren't very strict about it."

Still, the number of adolescents who reported buying scratch tickets was small, and increased with age. Moreover, when we asked rural participants how easy it would be to purchase scratch tickets, the unanimous answer was that it would be impossible, since the retailers or others in the store would know them. Thus, the evidence suggests that youth in urban areas can more easily purchase scratch tickets. It also seems that many urban retailers will not sell them to people who appear underage. For instance, one grade seven boy commented, "Yeah, where I used to live, you used to be able to [buy scratch tickets], but I moved and now you have to be 19."

Playing scratch tickets was not mentioned nearly as often as engaging in card games and wagering on sporting events. Approximately one-quarter of the participants reported *frequent* involvement (weekly to monthly) in at least one of these activities. Card games emerged as a common activity regardless of age, gender, or region. Girls played card games for money less than sporting pools, and did not participate in either activity as frequently as boys. The type and amount of wagers on card games also differed by age. The youngest participants who played cards stated that *if* they wagered on cards, it was most often pennies, nickels, or small items. For grade nine and eleven participants the ante was usually quarters, never more than a dollar. They rarely organized the card games, most occurred spontaneously as a way to pass time. Conversely, several boys reported orchestrating sports pools, usually at the beginning of a sports season. Some of the rural groups also mentioned 'sports pools' that newspapers and school teachers conducted. However, we might better define these as 'contests,' since the organizers required no fee or wager to enter or claim a prize.

Many youths across the groups reported betting on "carnival events." This took place in both urban and rural areas at "traveling carnivals," and in the rural areas at "school carnivals."

Moderator: When the carnival comes. So what happens there? Grade 9 Boy: "It's like with those things you put in a quarter and you spin a wheel or whatever and you win money, and if it lands on your card or whatever." Grade 11 Girl: "See our school's enforce, like, gambling. We have gambling things at our like, carnivals and stuff." [Another] "Yeah, they do. Winter carnivals. We have this whole room set up with, like, gambling stuff." Moderator: Okay. And what kind of gambling would that be? [Same] "Blackjack." [Another] "Like spin the wheel and put a quarter on -- it's going to land on a heart or a crown or whatever." [Another] "It's just a winter carnival thing." [Another] "Yeah, a winter carnival to make quick money, you know. It's not like you're going to lay \$200 down." [Another] "Our winter carnival's are fun. It's a big thing down here."

All who reported betting at carnival events stated they wagered small amounts of money.

Participation that occasionally takes place in other gambling activities included betting on fights, dice games for money, tossing coins, 'dare bets,' and bingo.

Betting on fights at or near school apparently takes place among young boys, however, it does not appear that this is very prevalent. Some rural girls and several grade seven boys in both the urban and rural groups claimed to have heard of people betting on fights at school. None had participated in this activity themselves.

Several male participants across the groups also reported playing dice for money or "craps." Tossing coins at a wall seems to be an urban pastime for young boys. Several grade seven boys stated that they often tossed quarters at a school wall, with the person coming closest to the wall taking all the coins. Again, this was typically done to pass time, or on the way home from school. The urban group of grade eleven boys reported that "older"

kids who caught younger ones playing this game would beat them up and take their money.

Rural girls reported “dare bets” more than boys, and further claimed that boys were typically the ones being dared. These types of bets might involve eating something unusual, or doing something that was considered stupid. The girls contended they would sometimes pay small sums of money to see these antics performed by boys.

One rural girl stated she had played bingo recently, and several claimed to have played bingo in school for small prizes. Overall, bingo was considered as an elderly person’s gambling activity.

Not one participant in the rural groups had been to a casino in Nova Scotia, nor had they played a Video Lottery Terminal. They asserted that the only place they could even *see* a VLT was at the bowling alley. Age specified awareness of VLTs in the rural groups. For instance, several grade seven boys did not know what a VLT was, whereas all of the grade eleven girls and boys knew they were found in liquor licensed establishments. Nevertheless, the rural participants viewed accessibility to liquor licensed establishments *in their town* as impossible.

Conversely, we found one to two boys in all of the urban groups who claimed to have played VLTs at least once. A few grade seven boys stated they played the machines when they were in the corner stores, which is improbable since the Government removed them from these sites more than five years ago. Still, one grade nine boy asserted that his mother’s friend had a VLT in the basement, and a grade eleven boy contended that a pool hall existed where VLTs were in a back room. Urban girls were aware of VLTs, but none mentioned ever playing one.

Two grade eleven girls claimed to have been in the casino, using false identification to gain access. As they put it, “They ask you for ID and then you’re either in or you’re out. If you don’t have [an ID] it’s, like, see you later.” [Another] “You know, you could be old enough to get in there and

if you don't have ID and they think you should be ID'd [*sic*] then too bad." The consensus among all of the grade eleven participants, urban and rural, was that accessing the casino, or a liquor licensed establishment with VLTs, would require false identification.

To summarize this section, we did not observe a high level of self-reported wagering among the adolescents. Overall, youth gambled most frequently in small stakes card games and sporting pools. Some played scratch tickets, bet on school fights, and made 'dare bets.' Even fewer played bingo, dice for money, and tossed coins. Moreover, apart from low-wager card games and betting on sports pools (and possibly carnival events), other gambling activities were either uncommon or unorganized. Accessibility by minors to the casino or legal VLT sites appears to be an issue that primarily concerns false identification. The availability of scratch tickets to minors in urban areas seems more problematic, although we noted that most of the youth received scratch tickets when they asked for them, or as gifts from parents or extended family.

## POTENTIAL INFLUENCES ON YOUTH GAMBLING

A substantial portion of each focus group session was devoted to exploring possible influences on youth gambling. **We caution, however, that inferring causality from focus group discussions is not possible. At best, we can simply document possible associations that require the triangulation of other well-controlled studies before suggesting causality.**

### Advertising and Promotions

#### *Unaided Recall of Lottery Advertising:*

To begin the discussion on advertising, each group was asked if they could describe any ads they had seen or heard for any type of gambling. Grade seven girls and boys appeared to have higher "unaided recall" of *television*

advertisements than the remaining participants. While speculation, this may be due to a higher frequency of television viewing among this age group.

The highest "unaided" recall of gaming advertising was found for Lotto 649 ads, with most participants from across the groups recalling one or more television, radio, or billboard advertisements for Lotto 649 tickets. Several participants in all of the urban groups could recall billboard and television advertising for the Casino in Halifax, whereas only grade seven and grade eleven boys in the rural groups mentioned casino advertising. Urban grade nine and grade eleven boys also thought of Proline advertisements without prompting. The only other advertising mentioned was an "infomercial," where James Coburn promotes a video that he claims will reveal how to win on slot machines. This was recalled by urban grade eleven girls, urban and rural grade seven boys, rural grade seven girls and rural grade nine and eleven boys. This commercial appears to have left an impression on many of the participants:

Grade 7 Girl: "I saw the one with this man, and he had a beard. He was talking about how he would send you this video on how to pick the right machines to play and stuff like that, and how they work." Grade 9 Girl: "There's a video out, like, what slot machines you can bet on that can win money. If you buy the video it increases your chances of winning." Grade 11 Boy: "It tells you which slots to play, how a slot machine works." [Moderator] "How believable is that? Do you think that there is a way. . ." [First Grade 11 Boy] "I don't know." [Another] "I think it's true. You see a lot of people coming out of there winning every time. So, if you like, watch the machines and you watch and see a machine that hasn't won in the longest time, I guess you could probably assume that one would soon win."

Once the participants had shared their 'top of mind' responses of gambling advertising they could remember, they were asked what messages the ads

conveyed<sup>4</sup>. Most of the groups thought the advertising carried two primary messages: the ads guarantee that players win money, and they show that gambling is fun (or can be fun if you win).

Excluding urban grade nine and eleven girls, and rural grade seven girls, the participants considered "the guaranteed win" a central theme in the advertising.

Grade 7 Girl: "They always say you're going to win something." [Another] "Money and happiness." Grade 9 Girl: "Spend lots of money and make lots." Grade 11 Girl: "They kind of like, only show the commercials where someone is winning." Grade 7 Boy: "They make you think you're going to win." Grade 9 Boy: "They're saying like, everybody who plays is going to win, right? It seems like it." Grade 11 Boy: "The [casino commercials] almost always say, 'come in and win.'"

Nevertheless, many of the participants did not appear to find this message credible. Several grade nine and eleven participants took issue with the fact that the advertising did not show the odds of winning, and this led them to think that "the guaranteed win" was unlikely. When the issue of showing the odds in the advertising was raised, participants were asked whether or not the odds should be displayed. We found that the participants who took issue with the odds were split over whether or not they should be displayed. About half felt it would be pointless, because they perceived the odds as a 'flaw in the product.' Using this rationale, they argued that no company would advertise the deficiencies of their product. To do so would ruin the advertising. The other half contended the ads bordered on misleading advertising since they did not state the chances of winning. Thus, it might lead "stupid" people to waste their money.

The fun gambling might provide, through the act or the winnings, was a second common theme mentioned in most of the groups:

---

4 The advertising the participants referred to was, for the most part, lottery advertising.

Grade 7 Girl: "Come and try it because it's fun." Grade 11 Girl: "They almost, like hypnotize you, like, tell you that it's fun to gamble, or go do it." Grade 7 Boy: "It's lots of fun." Grade 9 Boy: "Play, and if you win, you'll have a good time." Grade 11 Boy: "Everybody's got a dream. And you can have your dream if you buy a ticket."

None of the youths thought of buying an online lottery ticket as "fun." Some participants stated they would have fun, *if* they won the lottery, but otherwise it was pointless. The group of urban grade eleven boys felt that the "fun" theme in casino advertising was believable provided a person did not take it too seriously and could stop when they wanted.

Other advertising messages mentioned by a few participants were the allure or appeal of gambling, that gambling can make your dreams come true, and that the advertising increased awareness of the different gambling options available. Urban grade nine girls, grade nine boys, and grade eleven girls were most likely to think that lottery and casino advertising delivered these messages.

#### *Perceptions of a Lottery Advertisement versus a Beer Advertisement:*

To further explore youth reactions to gambling advertisements, we screened both a lottery ad and a beer ad, and had the participants discuss each in turn<sup>5</sup>. These ads were juxtaposed to explore what images the products' advertising conveyed to the participants.

We asked each participant to watch the ad, and without speaking to the others, write down their initial reactions on a piece of paper. As displayed in Table 3., the predominant message conveyed to the participants was that being rich is fun. "Fun to be rich" was the tag line in the commercial.

---

5. The ads were rotated between the groups to decide if showing one before the other generated any bias. We did not observe any noticeable ordering effect.



**Table 3. 'Top of Mind' Reactions to a Lotto Super Seven Advertisement**

Perceived Messages of Lotto Ad	Discussed in Group:			
	Urban Girls	Urban Boys	Rural Girls	Rural Boys
Fun to be Rich / Makes You Want to Be Rich	②③	④ ⑥	① ② ③	① ②
Buying Tickets Leads to Money/Fun	①②③		③	
Buying Tickets Leads to Money and Happiness	①②	⑤ ⑥	① ② ③	④
Need Money to be Happy/Have Fun	②③			
Guaranteed Win/Easy Win	①	④	① ② ③	④ ⑤
Guaranteed to Have Friends	①			
Guaranteed to Have 'Easy Life'	①		③	
Money Buys Happiness	① ③	④	③	⑤
Careless With Money/Waste Money	① ③	⑤ ⑥	②	④
Likes the Bare Naked Ladies Song	② ③	⑥	① ② ③	
Likes Kraft Dinner	① ③	④ ⑤ ⑥		①

- ① Grade 7 Girls (Halifax)  
 ② Grade 9 Girls (Halifax)  
 ③ Grade 11 Girls (Halifax)

- ④ Grade 7 Boys (Halifax)  
 ⑤ Grade 9 Boys (Halifax)  
 ⑥ Grade 11 Boys (Halifax)

- ① Grade 7 Girls (Liverpool)  
 ② Grade 9 Girls (Liverpool)  
 ③ Grade 11 Girls (Liverpool)

- ④ Grade 7 Boys (Liverpool)  
 ⑤ Grade 9 Boys (Liverpool)  
 ⑥ Grade 11 Boys (Liverpool)

Accordingly, the participants' discernment of this message is not surprising.

A second theme that emerged from the lottery ad is that buying lottery tickets will lead to money and happiness or fun. Many participants prefaced this with an "if," that is, "*if you win*." Moreover, a few girls did not think the messages were appropriate:

Grade 9 Girl: "It's like they seem to be saying it's fun to be rich. But if you go out and buy a great big old mansion, then you're going to have a lot more bills to pay. So it really wouldn't be fun to be rich."  
 Grade 11 Girl: "It's suggesting that if you had a million dollars, you'd have everything you wanted and you'd be completely happy. But that's not true."  
 Grade 9 Girl: "If you win, you can have everything you want, but money doesn't buy everything." [Another] "It seems like a really big problem with people nowadays, like drinking and buying tickets and stuff. People are really addicted. But it doesn't say anything on the commercial so people would never know."

We did not observe the same level of discontent with these messages among boys. Rural grade nine and eleven boys thought the messages were believable, if you won. However, they did not believe the chances of winning were high, although they felt the ad guaranteed it.

Grade 9 Boy: "They don't tell you that your chances are one in twenty million to win that much."  
 Grade 7 Girl: "It's saying if you buy them you can win, and if you buy them and win, you can buy anything you've ever wanted. But like, people get them every day because they think they're going to win, and they don't."  
 Grade 9 Girl: "If you play the game you'll become rich or you'll win a million dollars. But that's not always what you win. You might win five dollars."

Other messages the participants deduced from the ad were that being rich leads to recklessness, money will guarantee friends and happiness, and that

people require money to be happy or have fun. As with the other messages, some participants did not like these messages while others were indifferent.

Lastly, we observed that many participants recognized the 'jingle' associated with the ad, a cover version of the *Bare Naked Ladies* song, "If I had a million dollars." The recall of this song, and the unaided mention of Kraft Dinner might suggest this ad had accidentally targeted youth. However, we feel this premise is unfounded. The ads did not appear to change the participant's perceptions of lottery tickets, which can best be described as "for adults." Nevertheless, the "dream messages" were easily grasped by most of the adolescents.

The participants' perceptions of the messages from the beer ad were not as diverse as for the lottery ad. Most thought the message from the beer ad was either that drinking beer can be fun, or a focus on beer as a product. As one participant stated, "Well, like beer ads are all the same. They're all having a party, or they're all having lots of fun." A few participants also thought that the advertising was promoting a message of "sex and alcohol." They objected specifically to the way beer ads portrayed women:

Grade 11 Girl: "In every beer commercial there's some woman giving some guy a look, and then he takes a beer." Grade 7 Girl: "It says that when you drink beer, you know there's going to be a woman in a little skirt around you." Grade 9 Boy: "It's all about sex and alcohol. That's pretty much what they're trying to sell." [Another] "Drink our beer and get laid, it's pretty much what they're saying." Grade 7 Boy: "Beer makes you happy and gives you women."

We observed that boys were most likely to recall beer ads they felt produced these types of images.

After the participants had viewed and commented on both advertisements, we asked them what, if anything, the ads had in common. Several themes emerged across the groups. First, most of the adolescents felt that the ads

were selling lottery tickets or a particular brand of beer. This message was lost on many participants because they perceived age restrictions, or did not care about the quality of the product (in this case beer).

Grade 7 Girl: "They don't say anything about having to be oh, like, a certain age to play or a certain age to drink." Grade 9 Girl: "You can't do either unless, you're like, older or something." Grade 9 Boy "That [beer] commercial is all about taste. At our age, we don't care which one tastes better. We just care which one gets us plastered faster." [Another] "Yeah!" [First] "So it doesn't matter about the brand."

In fact, most of the participants' reported "changing the channel" whenever they saw beer or lottery ads on television. We question this, because of high unaided recall of both types of advertising.

A second commonality found in both ads was a message of fun, excitement, and possibly happiness for purchasers of the product. Some participants questioned this, stating the ads did not show what they perceived to be a double-edged sword.

Grade 9 Girl: "It's like, buy our ticket, buy our beer. You can win or you can get drunk. The beer commercials never say if you drink too much, you're going to end up sick. And the gambling one never tells you that you can lose everything." Grade 11 Boy: "I think they are sending subliminal messages, because you never see anyone puking in a toilet, or losing their house or anything."

Additionally, many participants felt that the beer ads were more credible because winning the lottery was perceived as more difficult than obtaining beer:

Grade 11 Boy: "The idea of beer is a lot more obtainable than the millions of dollars from the casinos." [Another] "Plus, when you see the commercial for the lottery, even if you want to gamble, you know that it's going to be almost impossible to get into the casino. Getting liquor is not hard though." Grade 9 Girl: "It's like, they have these contests on Much Music, like you can win a ticket to see some concert. But no one ever calls about it. Because what's the chances of winning, right?" [Another] "You're more likely to get beer than win the lottery!"

In short, while we cannot decide the impact of advertising on focus group participants, we speculate that the lottery and beer ads did not affect the adolescents in terms of purchasing decisions over lottery tickets or beer. The participants were more likely to deduce, "buy our beer" than "purchase our lottery tickets from the ads," but they also did not perceive either as applicable to them. Still, many of the youths picked up the message that drinking beer or buying lottery tickets leads to fun, excitement, and happiness, and, for at least some, this was credible and believable – even if it meant that you had to win the lottery. These advertisements may not be directly targeting youth, but the participants appeared to conclude a Father's Day promotion does seem to do just that.

#### *Perceptions of a Father's Day Lottery Promotion:*

After viewing the television ads, we gave each participant a copy of a Father's Day Card used as part of a lottery promotion (Figure 1). A scratch-n-win lottery ticket could be found inside each card (seen at Figure 2.). When the card is opened the song, "You are my sunshine," plays. Each participant was asked to view the card, and without discussion, write down what the card said to them.

One theme that emerged among several participants was that the card encouraged children to gamble:

Figure 1

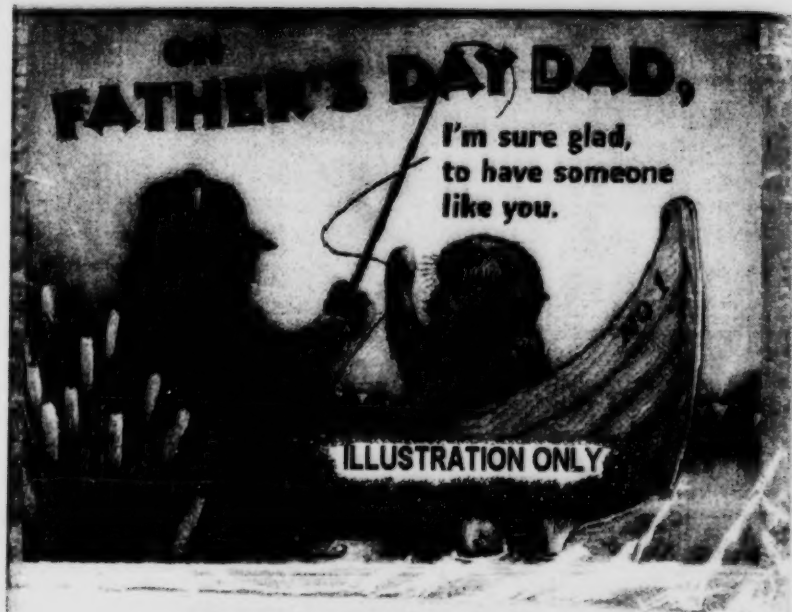


Figure 2



Grade 7 Girl: "I thought it lures kids into cute little otters. . . like it's luring kids into, like buying it and giving it to their father." [Another] It says blackjack is fun, and so Father's Day has to have lottery tickets. Otters like to gamble and the best present is a lottery ticket." Grade 9 Girl: "It's influencing and getting children to look at scratch tickets, introducing them to it." [Moderator] "In what way?" [First] "Well, it's showing them to buy lottery tickets because their Dad will like them." Grade 7 Boy: "It's like, Dads like to gamble so little kids, it's going to urge them to start to gamble." Grade 11 Girl: "The mom is most likely purchasing the card, but it looks like it should be coming from a little kid, because it's a little kid and their dad fishing."

Additionally, some participants felt that it tied Father's Day to lottery tickets, and they did not feel this was appropriate:

Grade 11 Boy: "I don't think it's a good idea for a Father's Day card. I mean for a kid or something giving it to their father, and then seeing their father with a scratch ticket. They're showing that scratch tickets are, well, they're something for Father's Day, except I don't think it's good." [Another] . . . the lotto company shouldn't be taking advantage of these here sales. That's what it seems they're doing. Because they have ones for Mother's Day, and Christmas, and stuff too. It's like they're using every event they can just to make some money." Grade 11 Girl: It's encouraging gambling, and since that was a Father's Day card, gambling has become morally acceptable to that family."

Several participants also saw the card as conveying the wrong message:

Grade 9 Girl: "It says, 'I'm sure glad to have someone like you. It's like if you give this to him, you're going to be closer to him and stuff.'"  
 Grade 9 Boy: "If you get this for your Father, he'll love you and it'll kind of alleviate tension between you."  
 Grade 11 Girl: "It's pretty sad that they're saying it's a good thing he's glad to have a Dad like that, but I mean to give him a scratch ticket? Just to show how much of a great Dad he is, you're going to give him a scratch ticket?"  
 Grade 11 Boy: "I think the problem with it is it says, 'I'm sure glad to have a son like you. With the lottery ticket, it's not sending a good message. Like, yeah, I'm glad you're my son because you gave me something I can gamble with a little bit. It's not quite a good message.'"

Further, a few participants across the groups thought it was a "sneaky" marketing ploy:

Grade 9 Boy: "Not only is it a gift, but it can also entice people to want to keep buying the cards. [Another] I think he's got a point. They can't get the Father's Day cards all year long, but they could be able to get the blackjack tickets all year long. It's a way of making more money."  
 Grade 11 Boy: "It's kind of sneaky because they use gambling as a gift. So like the person who was doing it, if they don't like gambling, they have no choice because it's a gift." [Another] But it's not really gambling though. That's like giving twenty dollars worth of chips at the casino, right? So, it's not really bad if he loses it."

Notwithstanding the above, almost half of the participants liked the card and thought it would make a thoughtful gift, especially if given with something else:



Grade 9 Boy: "Scratch tickets are a very common thing for people to put in a card." [Another] "I think it's a good gift. It would be nice for someone who likes scratch tickets. It would be better than getting a regular card, because with this he would have something to do." Grade 11 Boy: "I thought it was a different Father's Day card. It's kind of neat." Grade 7 Girl: "I like the card, because it's kind of cute. And if your Dad likes scratch tickets, then he'd enjoy it." Grade 9 Girl: "I think it would be a good gift for someone who likes scratch tickets. It's a little extra than just a card." Grade 11 Girl: "I like it, but I think it would be better if it had a Father's Day scratch ticket to go with it." Grade 11 Girl: "Personally, I'd go out and buy that for my dad. It's cute and I know my dad likes fishing, so I'd buy it." Grade 9 Boy: "If it's someone who really likes tickets and buys them all the time, then it would be a neat gift."

We also asked the participants who they thought would most likely purchase the card. The consensus across the groups was that the card was meant for a child to give to their father. Moreover, since restrictions do not allow children to purchase lottery products, it would be up to the mother or another adult to purchase the card for them.

Grade 7 Boy: "I think it's for little kids, because it's a baby beaver and a daddy beaver." [Another] "Yeah, it's not like a daddy beaver and a granddaddy beaver ." Grade 9 Girl: "It's not a mature gift from an adult to an adult." [Another] "Well, no, a little kid to their dad." [First Girl] "Exactly!" [Another] "Someone, like, five years old." Grade 11 Girl: "I'm looking at that card and I'm thinking, well what kid can go in and buy that for their father. It would have to be the mother buying it." Grade 11 Boy: "I can just see some kid standing their crying because his mother won't buy the card for him." Grade 9 Boy: " I would say that it's meant for kids, because it's like a cartoon thing. An adult like yourself [to moderator] would probably want to pick out something more sentimental." [Another] "It would probably be young kids who would want something like that." [Moderator] "What age do you think?" Grade 9 Boy: "Young, ten to twelve maybe." [Moderator] "How would they go about getting the card?" Grade 9 Boy: "Get their mom to buy it." [All agree]

While the groups were split on the appropriateness of lottery promotions around family occasions and the message the card conveyed, they felt the promotion would appeal to small children most of all. Additionally, the general feeling across the groups was that children would implore an adult to purchase the card for them, or adults would purchase the card for their children to give as a Father's Day present. In either case, the card may have inadvertently targeted children.

In summary, advertising for lotteries and casino gaming is pervasive for many urban and rural youths. The evidence suggests that children do not perceive these advertisements as meant for them. We may speculate however, that these ads are still conveying messages of an easy win, instant gratification, and /or fun and excitement from gambling. Moreover, it seems that a Father's Day lottery promotion may have unintentionally targeted children. Nevertheless, gaming advertising and 'family oriented' promotions illustrate societal acceptance of various forms of gambling.

For youths, this acceptance may be further amplified through social activities within the family, school, and wider environment.

### **Gambling in the Family**

As noted under participation, most of the participants claimed to have received a scratch ticket from a parent or other family member at least once. A few participants also mentioned engaging in gambling activities with members of their families:

Grade 7 Girl: "When we went to the horse races, my father, well, we all picked a horse and we would bet. Then my dad would go down and get the tickets just so it would be more fun, because we all had a horse to cheer for." Grade 7 Boy: "My grandmother always takes my money at crazy eights, but I let her win." Grade 9 Girl: "My dad and my brother play Proline every night." [Moderator] "Oh yeah. How old's your brother." [First] "He's 17." Grade 9 Boy: "We almost always get my grandfather a card for his birthday and we put a few scratch tickets in it. It's just that extra something." Grade 11 Girl: "When I was younger, my grandmother used to take me to bingo. Someone, an adult, would have to yell out 'Bingo' for me, because I wasn't old enough." Grade 11 Boy: "Sometimes when I'm out with my Dad, he'll buy two scratch tickets and give me one, but if I win, he keeps the money. That sucks!"

Furthermore, approximately three-quarters of the participants described a wide range of gambling activities their family members engaged in such as online and scratch lottery tickets, bingo, cards for money with friends, video and casino gaming. The reported frequency of gambling activities also varied widely within each group. A few participants claimed a family member purchased scratch tickets or went to bingo every day, while many others stated it was a rare occasion. Still, the bulk of the youths were aware of gambling activities their parents and, in some cases, grandparents or siblings were involved in.

We observed that the participants were more defensive when relating family members' involvement in casino or video gaming than lotteries or bingo. That is, most of the participants who stated their parents went to a casino or played VLTs further qualified their remarks with regards to frequency of attendance, monies spent and so forth. This was rarely done with bingo or lottery tickets. This may also be an indicator of the social acceptance of the latter forms of gambling.

### **Gambling at School**

Several of the participants mentioned involvement with gaming activities at school. Most often these activities were organized as events by the schools or individuals within the schools. These included bingo, hockey pools (without wagering), and winter carnivals – where the students would purchase tickets and use them in charity casinos. Most of the participants who mentioned these activities felt they were “innocent” forms of gambling.

Grade 9 Girl: "We have a fall fair, where we have a casino, but it's only, like, for a quarter, and you get, like, tickets and go in and win some dinky little prize." [Another] There's, like, cake walks and jellybean guessing. Just all that stuff which you pay money to win something. [Moderator] Would you guys consider that gambling or is it not gambling? "No, it's basically like scratch tickets where you can win a car or something." [Another] "Like, we also play bingo sometimes in class." [Another] "There's two types of gambling. Innocent gambling and serious gambling." [Moderator] "What are the innocent types." [First] "Cake walks and jelly bean guesses and bingo." [Another] "and raffle tickets and stuff."

However, a few participants across the groups thought of these activities differently. As noted above in *Participation and Access to Gambling Activities*, a few participants thought that the carnival games reinforced the

concept of gambling. Additionally, a grade 11 girl commented about the hockey pools organized by teachers in school: "It's not particularly good because its introducing kids to like, hockey pools, and stuff like that. And so when they're older, they could get into hockey pools because they liked it so much when they were little."

Lastly, three grade 11 boys claimed to have played "craps" with a teacher after school for quarters. While this was an isolated incident, the group of boys did not appear to think it was unusual.

### **Youth Gambling in the Community**

Many of the participants reported being able to wager small amounts of money at fairs and carnivals. This appeared to be more pronounced in the rural groups. While several of the participants stated the minimum age to engage in these activities was fourteen, they claimed to have done so at earlier ages. This was apparently accomplished through the assistance of older siblings or friends, who would help them to place wagers on the games. Several participants reported playing bingo and a few male participants also recounted observing or participating in betting on golf, hockey, and other sports activities in their region.

To recap, the participants appeared to be cognizant (and at times, part of) gambling activities that take place in the family, school, and community. The impacts this may have on youth perceptions of, and participation in, gambling activities cannot be ascertained from this study. However, we hypothesize that youth who live in a social environment where gambling is accepted and practiced will be more likely to engage in the behaviour themselves.

## DISCUSSION

The goal of this study was to explore youth definitions of gambling, examine perceptions of gambling in relation to other perceived adolescent risk activities, probe participation in gambling among youth and factors that might be seen as influencing participation, and examine recall and perceptions of gaming advertising.

Definitions of gambling were found to differ between the youngest participants and the remainder of the groups. Excluding grade seven urban males, the youngest participants were more likely to mention the *consequences* of gambling (ie. gambling losses) in their definitions than – for the most part – their older counterparts. A few of the older adolescents appeared to have developed misperceptions about gambling outcomes, specifically related to slot machines. We have no way of knowing whether young adolescents are more sensitive about the immediate outcomes of games of chance. However, if this is found to be the case, an important question would be whether these perceptions diminish as youth grow older, and, if so, why. Since the youngest *urban male* participants defined gambling in a manner similar to the older participants, any differences in perceptions are probably not due to a cohort effect, but from influences in their social environment.

A second point of interest can be found in youth perceptions of gambling activities. When asked to describe gambling activities, a majority of the participants thought of card games for money, slot machines, lotteries, sports betting, horse racing, and simple or 'dare' bets. They did not think as often of casino table games, dice games for money, tossing coins, VLTs, bingo, or raffles.

This is perplexing, and may suggest that adolescents' perceptions of gambling activities are influenced through a variety of means including personal experience, movies and advertising, family and friends, and their wider social environment. For instance, population surveys conducted for the Nova Scotia Alcohol and Gaming Authority have consistently shown

that approximately 5% of adults in Nova Scotia participate in card games for money outside of a casino monthly (eg. Focal Research Consultants, 1999). Conversely, in 1996, 14% of students in Nova Scotia were found to play cards for money on a monthly basis (*Nova Scotia Student Drug Use 1996*). Most of the participants in this study had either seen others playing cards for money or engaged in this activity themselves, and it is not surprising that they would recall this activity. Moreover, few of the participants claimed to have been inside a casino or location where VLTs are situated, yet most initially thought of slot machines as gambling, but not VLTs. Incidentally, many of the adolescents recalled, unprompted, a television commercial purporting to show how to win on slot machines. It is plausible that this ad reinforced a societal definition of slot machines as gambling devices. Although video gaming has received much attention as a gambling activity, if the youths did not pay attention to the news media, they may not have been as exposed to this controversial form of gaming. Finally, most of the adolescents were aware of raffles, but did not perceive it as 'serious' gambling because the monies were allocated to a good cause. Thus, while exposure to an activity appears as a factor in youth designations of an activity as gambling, it is just one. Societal definitions and the youths' own perceptions are also involved, and the latter appears central when it comes to perceived harm from gambling.

The adolescents in this study showed little concern about problem gambling amongst themselves, particularly when compared with other adolescent risk activities, such as drugs and alcohol. The primary reason was they did not feel they were involved in 'serious' gambling, and it was perceived to be an adult's problem; they had little to worry about until they were adults. The findings suggest that the youths are using the heuristics of *availability* and *representativeness* when assessing the risks of problem gambling for themselves.

The perceptual bias of 'availability' refers to estimating the outcomes of events based on the observed frequency of the event (Tversky & Khaneman, 1973, as cited in Millstein, 1993). All things being equal, events that easily come to mind tend to be overestimated in terms of their

actual frequency. The 'availability' of an event is influenced by the actual frequency, personal experiences, memorability and salience of the experience. Theories of cognitive development for youth risk behaviour posit that adolescents believe they are more invulnerable than adults. However, the *availability bias* may provide an explanation for increased adolescent perceptions of invulnerability because of inexperience, relative to adults, in observing negative outcomes (Millstein, 1993:63).

The *representativeness heuristic* refers to people ignoring information about base rates when they have information about correlates of events (Khaneman & Tversky, 1972, as cited in Millstein, 1993). Attributes perceived as highly correlated with events tend to lead to biased perceptions of the risk factors associated with the events. For instance, travelling by plane is perceived by many as very risky, despite the fact that the probability of injury or death is lower than for travelling by car. Millstein (1993) argues that stereotypical thinking of attributes that are negative in tone will also increase notions of invulnerability among youth.

The evidence suggests that adolescents are not concerned about developing problems with their gambling because of a perceived lack of availability of the risk, and because they believe it to be an 'older persons' problem." Thus, problem gambling is extraneous to them because they do not know of any friends or others their age, who *appear* to have problems with their gambling. Nevertheless, media coverage and education can increase the availability of the risk, and change the perceptions of representativeness. For instance, coverage of auto accidents where underage drinking and driving are involved demonstrates to youth that it can happen to them as well. Moreover, when asked why gambling was not a risk activity, but drugs and alcohol were, a common response was that people continuously talked to them about it. The "invisible" nature of problem gambling may also result in youths not 'seeing' gambling problems among people their age. Anything that can be done to demonstrate the *availability* of the risk and show that it does apply to them may alter their perceptions regarding gambling problems among people their age.



Turning to participation in gambling activities, it is not surprising that prevalence studies find high levels of involvement in gambling among youth since many of these activities appear to originate in the family. The findings here support Gupta and Derevensky's (1997) argument that parents often sanction gambling behaviour among youth. In particular, we noted that the bulk of the participants had played scratch tickets, and these were often given by family members as gifts on special occasions. There were also many instances where the youths would be given scratch tickets by a family member on an *ad hoc* basis. However, parents, schools, and the community may also be inadvertently affecting children's propensity to gamble. The youths here were very perceptive as to what was taking place in their households, and they appeared to have ideas about the nature and extent of their parents gambling. Moreover, gambling activities are organized for youths by schools and at community fairs, which suggests that our society is willing to tolerate or accept youth gambling in specific activities.

Longitudinal and multicultural research is required to determine what – if any – impacts societal influences and limited access to gambling has on youth. It could be argued that it teaches youth to gamble in a socially responsible manner. Conversely, providing adolescents with opportunities to gamble may lead to problematic behaviour that will remain with them for life. Either way, the focus groups suggest that adolescents will place wagers on activities outside the realm of legal gambling. Card games for money, sporting pools, and “dare bets” all seem quite pervasive, and may be a response to their social environment. Card games take place as a way to pass time, whereas betting pools are tied to sporting events and might be a way to cheer for a team as much as gambling. Dare bets can run the gamut from innocent pranks to Russian Roulette, and the types of dare bets are often contingent on the youths involved. While it is important to determine the prevalence of youths who cannot control their gambling, at the same time, we should be monitoring the prevalence and types of dangerous “dare betting” activities that might be occurring among youth. A few youths in the focus groups were betting others to jump from bridges, or doing so themselves.

Many of the adolescents could recall, unprompted, lottery advertising – and to a lesser extent – casino advertising. The adolescents perceived the messages from these ads as promising a win and/or guaranteed fun. Moreover, when a lottery advertisement was shown to the groups, many of the participants concluded the message was winning the lottery leads to instant happiness. Although the ads did not appear to be targeting youth, and we have no way of determining the impact the ads may be having, we still have to question whether these are the kinds of messages we should be sending to youth. Taken further, an infomercial that purports to show people how to win on slot machines may give adolescents the impression that these machines can somehow be influenced, leading to problems with gambling fallacies. Finally, a lottery promotion may have mistakenly targeted youth in Nova Scotia. It is imperative that the gaming industry and regulatory agencies ensure that youth are not directly or indirectly targeted or misinformed about the nature of games of chance.

In conclusion, it appears that adolescents may hold diverse views, in comparison to adults, about the nature of and possible outcomes of gambling. This research suggests that youth do not perceive gambling as a risk behaviour that holds any potential harm for them. If this finding is confirmed, we need to further pursue the reasons behind these perceptions. We hypothesize that increased 'availability' through education and well-targeted communications would alter this perception by increasing their 'representation' in the 'problem population.' We also need to determine what impacts, if any, lottery and other gaming advertising have on adolescents' perceptions of games of chance, their values, and lifestyle choices. Closely tied to this is the question of where we draw the line in terms of access and availability to gaming options among youth. At what point (and what age) do games of chance (and promotions for the games) become unacceptable for youth, and under what rationale? Answering this question will ensure that future generations will not be negatively impacted by societal influences that, if necessary, we may be able to control.

## BIBLIOGRAPHY

- Addictions Foundation of Manitoba (1999). Manitoba Youth Gambling Prevalence Study: Summary of Findings.
- Boutilier, Susan (1997). More Than Just a Game: Teen's Views of Gambling – A Qualitative Investigation, Beechville-Lakeside-Timberlea Teen Health Centre.
- Focal Research Consultants Limited (1999). "A Survey of the Prevalence and Perceptions of Gaming in Nova Scotia, 1999," Nova Scotia Alcohol and Gaming Authority Annual Gaming Report 1998/1999, Vol II.
- Gupta, R. & Dervensky, J. (1997). Familial and social influences on juvenile gambling behavior. Journal of Gambling Studies, 13, 179-192.
- Ladouceur, R. and Dube, D. (1994). Gambling among primary school students in the Quebec Metropolitan area. Journal of Gambling Studies, 10, 363 - 370.
- Kahneman, D & Tversky, A. (1972), "Subjective Probability: A judgement of representativeness.", cited in Millstein, Susan (1993) Perceptual, Attributional, and Affective Processes in Perceptions of Vulnerability Through the Life Span.
- Nova Scotia Department of Health and Dalhousie University (1996) .Nova Scotia Student Drug Use 1996: Technical Report.
- Millstein, Susan (1993) "Perceptual, Attributional, and Affective Processes in Perceptions of Vulnerability Through the Life Span." in Nancy J. Bell and Robert W. Bell eds., (1993) Adolescent Risk Taking, London: Sage.

- Omnifacts Research Ltd. (1993). An Examination of the Prevalence of Gambling in Nova Scotia. A report prepared for the Nova Scotia Department of Health, Drug Dependency Services.
- Stinchfield, R., Casuto, N., Winters, K and Latimer, W. (1997). Prevalence of gambling among Minnesota public school students in 1992 and 1995. Journal of Gambling Studies, 13, 25-48.
- Tversky A. & Kaheman D. (1973), "Availability: A Heuristic for Judging Frequency and Probability.", cited in Millstein, Susan (1993) Perceptual, Attributional, and Affective Processes in Perceptions of Vulnerabilty Through the Life Span.
- Wynn Resources Ltd. (1996). Adolescent Gambling and Problem Gambling in Alberta. A report prepared for the Alberta Alcohol and Drug Abuse Commission.

**APPENDICES**

## Youth Gambling Discussion Outline

August 16, 1999

### Introduction:

- ☛ Introduction of the researcher. The researcher is not connected to the process in any way. Explain how and why they were selected. Explain focus group technique, audio-taping, and (if applicable) the one-way mirror. There are no right or wrong answers. We want their honest thoughts on the topics. Disagreeing with someone in the group is okay, but remember to respect others' opinions also. Ask the participants to speak clearly, and one at a time so as not to garble the audiotape.

Ensure that all of the participants are comfortable with the process, and that each person knows they can leave if they find that the topics make them uncomfortable.

### Warm-Up:

- ☛ Individual introductions around the table -- first names only. What is your favourite type of music? Sports Team? Probe to see if they have a favourite singer / band / team?
- ☛ Ask around the table in reverse order. Let me ask you "name of participant," some people your age have played scratch tickets while others haven't. How about yourself? Have you ever played a scratch-n-win ticket? If yes, probe for types and frequency.

### Youth Risk Behaviour

What kinds of things are happening either at school or in your neighbourhood that you feel is potentially risky or harmful, either to you or others around you? Probe for detail.

If betting/gambling is included: What kinds of betting or gambling would you be referring to?

If betting/gambling is not included, probe for reasons why it is not included after participants have defined gambling.

### **Definitions of Gambling?**

I want you to write down on the piece of paper in front of you what you think gambling means. In other words, if I was to ask you what gambling is, what would you say? Ask each participant to read what they have written and discuss with the group. Attempt to build a definition of gambling that is agreeable to all.

What activities does gambling include? Probe for detail. What reasons would people have for gambling? Probe for detail.

### **Participation in betting/gambling?**

If I was to hang around with you guys for a few weeks, what kinds of betting do you think I might see? Would the betting be among people you don't know very well, or would it be your friends? How about yourselves? Do you guys ever bet on things?

Probe for types of betting activities and types and amounts of wagers. Bingo, sports betting, pro-line, etc.

Probe for social organization of participation (eg. Are the activities organized as group events or are they sporadic events?).

Determine who initiates the betting?

### **Influences on betting?**

Okay, let's say I was going to hang around with you at home. What kinds of things would I see the adults in your household doing?

Let's say that some friends of yours planned to play cards for money and asked you to join in. How would that make you feel? Would you join in or not? What reasons would you have for playing? What reasons would you have for not playing?

## Advertising and Marketing

Can you recall any commercials or ads for lotteries, casinos, bingo, etc.  
- If yes, what are their recollections of the advertising?

What do these ads say to you? What are the messages from the ads?

*Show lottery ads and beer ads.*

I am going to show you a few commercials and I would like you to write down the first thing that comes to mind on the sheet of paper in front of you. Basically, what do you think this ad is saying to you?

Go around the table and have each participant read out what they have written and discuss.

Probe for level of attention paid to the ads, and who they feel the ads are meant for.

I am now going to show you a card with a scratch ticket that came inside of it. I want you to write down on the piece of paper in front of you, what you think of it. Again, what is this card saying to you?

Go around the table and have each participant read out what they have written and discuss.

What age group do you think this card is meant for?

### Close:

Ask observers for additional questions.

Ask participants for questions or comments.

Thank participants and stress that if they feel uncomfortable at any time after the group to talk it over with someone they trust. If they find they are very uncomfortable, ensure that they have someone call the project coordinator.





DATE

Alcohol And Gaming Authority

Communications &amp; Research

P.O. Box 545, 40 Alderney Drive,  
Alderney Gate Dartmouth, NS B2Y 3Y8

Parent/Guardian of FIELD(Child Name)

FIELD(Street)

FIELD(City,Prov)

FIELD(Postal Code)

Dear FIELD(Parent/Guardian)

I would like to take this opportunity to thank you for allowing your child to participate in our research project on perceptions of gambling among youth. This project represents an important part of the NSAGA's continuous study of issues related to all forms of gambling in the province.

The study involves twelve discussion groups in Metropolitan Halifax and a rural area to explore perceptions, attitudes, and betting behaviour among youth who are aged 12 to 18. Each group will have eight to ten girls/boys of their own age group sitting at a table. Topics will be introduced by a trained facilitator. In particular, the discussion groups will address the following topics:

Youth Definitions of Risk Behavior

Youth Definitions of Gambling

Youth Perceptions and Participation in betting activities (an example would be sports pools)

Influences on Betting Behavior

Perceptions of Lottery Advertising and Marketing among Youth (Lottery and beer television ads, and a photo-copy of two scratch tickets related to family occasions will be shown, with the participants being asked to comment on them)

As the project co-ordinator and discussion facilitator for the groups, I want to assure you that the following standard research ethics are being followed:

- 1) The participants will not be identified in any way, either before, during, or after the research.

We will be audio-taping the discussion groups, which is merely a way of keeping notes for the report that I will be writing afterward. The facility also has a one-way mirror from which researchers and policy makers will be observing the groups. I assure you that your child will not be identified in any way (before, during, or after the groups), and the audio tapes will be erased once they have been transcribed.

- 2) Potential harm to the participants will be identified and relayed to the participants (and guardians) to ensure their informed consent.

I have conducted many discussion groups with teens on gambling and sensitive issues, such as domestic violence, and I cannot foresee any risks associated with these discussion groups.

However, it is important for both you and your child to understand that they can leave the discussion group at any time should they feel uncomfortable, or for any other reason. Additionally, every group has at least one participant who remains silent and this is not something to be concerned about. Should your child decide to leave the group, I will make every effort to ensure that they can do so without feeling awkward. They will still be provided with the honorarium they were promised.

- 3) The participants (and herein, their guardians) will not be deceived in any way, so as to undermine their informed consent in the research.

Although I have provided the general topics, I would be pleased to describe the entire process, including the actual questions to be asked in the group with you (and, if necessary, your child).

One reason we do not generally tell participants *exactly* what the discussion group will involve is that we want to get their initial responses to the various topics. If the participants know in advance, it provides them with the opportunity to think about their responses before arriving at the group.

Please do not discuss the topics of the group with your child prior to the group, as this may compromise our study.

- 4) The participant must fully understand the research process (and any potential risks) such that they can provide informed consent to their participation.

**I have included a form that must be signed by both your child and yourself before they will be allowed to participate in the group discussion. This is not a waiver, but is confirming that both you and your child understand the process that will take place. Again, I would be most happy to discuss any aspects that you or your child are unfamiliar with so as to ensure your informed consent.**

The group that your child is scheduled to participate in will be held on FIELD(Date) at FIELD(Time).

Please ensure that your child arrives at the facility a minimum of ten minutes before the group commences. Once the group begins, it is difficult to have participants join in. I also invite you to wait at the facility for your child while the group is ongoing.

Finally, again, I ask that you and your child sign the accompanying form so that we can admit them to the group. This is a standard research ethic for discussion groups and simply acknowledges that you and they have given consent for participation in the discussion group.

I would be happy to discuss the reasons for the project, the group discussion process, and any other questions or concerns you may have about the study. I can be reached at 424-8607. If I am unavailable when you call, please leave a message and I will return your call as soon as I am able.

Once again, thank you for your contribution to this important project.

Sincerely,

Signature Block



Alcohol And Gaming Authority

Communications & Research

P.O. Box 545, 40 Alderney Drive, Alderney  
Gate Dartmouth, NS B2Y 3Y8

This study is being conducted by the Nova Scotia Alcohol and Gaming Authority. The purpose of the study is to talk with youth about gambling issues. The information will add to the existing knowledge in the area of perceptions and participation of youth gambling.

The study format involves discussion groups with eight to ten girls/boys of the same age. Each group will last about one and one-half hours. The discussion groups will be audio recorded and viewed by researchers and policy makers from the Nova Scotia Alcohol and Gaming Authority. The audio tapes will be transcribed without participant names. The identity of the participants will not be revealed for any reason at any time.

There are no known risks to involvement in this study, and participation is completely voluntary. Signing this form does not constitute a waiver of responsibility of the Nova Scotia Alcohol and Gaming Authority. However, the undersigned acknowledges the following:

- ◆ The participant can withdraw from participation at any time without reason.
- ◆ Some participants speak more than others, and participants should not feel that they have to speak during the group discussion.
- ◆ Sandwiches and refreshments will be served to participants. It is important for participants to inform the host/hostess at the facility of any allergies.
- ◆ The project co-ordinator will make himself available before, during, and after the discussion groups to discuss any questions or concerns that evolve from the project.

\_\_\_\_\_  
Child Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent/Guardian of Child Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



# Appendix F

## OVERVIEW

In May, 1991, Nova Scotia was one of the first jurisdictions in North America to undertake the administration/management and control of the video lottery market. By 1996, play of video lottery games accounted for almost \$375 million wagered by Nova Scotians and approximately 54% of the provincial revenue derived from total gambling activities. Video lottery terminals are now available in all provinces, except Ontario and British Columbia, although Ontario is currently preparing to launch its video lottery program. However, to date, there had been no random quantitative studies undertaken by any provincial jurisdiction which specifically examined video lottery players. Consequently, much of what is known about the players and video lottery play habits is based on very small random samples, non-random qualitative studies, anecdotal information or from treatment populations.

As video lottery becomes more widespread, the negative consequences of play are also becoming more evident. In the absence of any conclusive information on the association between video lottery play and problem gambling, the public and service providers, on a community level, are struggling to cope with the video lottery issue. Removal or banning of the machines is often viewed as the only reasonable alternative. Previous to May, 1991, and the government operation of video lotteries, the "Grey Market" for the illegal machines was estimated at approximately 1,500 to 2,000, with presumably similar negative consequences for players (although those adults likely comprised a smaller portion of the population). Banning video lottery play may only serve to eliminate social play and drive the problems associated with video lottery gambling underground.

There is a strong need for accurate, reliable information on video lottery play and the factors contributing to problem play. Although currently, on a per capita basis, Nova Scotia tends to be ranked sixth in Canada in terms of the number of terminals per 1000 residents (3.55), the province still represents one of the most mature and evolved video lottery gaming markets in North America.

In recognition of a need to manage the consequences of having had the machines available over the past seven

years, the Nova Scotia Department of Health Problem Gambling Services wished to develop a more concise and extensive profile of VL Players in this province. Specifically, they wanted to determine the profile of problem and non-problem players to develop an understanding of the mechanisms players can use to overcome problem gambling on video lottery terminals, and to develop a list of indicators that can be used for the identification, prevention and treatment of problem video lottery players.

In June, 1997, Focal Research Consultants was commissioned, by the Department of Health, to undertake the first benchmark study of video lottery play in Nova Scotia. Based on an extensive literature review and pilot testing for the project, a questionnaire and methodology were specifically designed to address the study objectives.

### Nova Scotia Video Lottery Players Survey (October 1997 - January 1998):

The 1997/98 Nova Scotia VL Players' Survey provides extensive information as to the behaviours, motivations and characteristics of VL players, thereby making a significant contribution to the understanding of video lottery gambling. In addition, the study profiles VL gambling within the context of all adults in the province, thus establishing benchmark measures against which VL play in Nova Scotia can be subsequently monitored and tracked. Specifically, the study results can be directly applied in the design of Problem VL Gambling treatment strategies and harm reduction/minimization initiatives.

The study was designed to offer flexibility in order to ensure the highest quality data upon which to base decisions, while providing a cost effective vehicle for exploring additional issues of interest as required. Given the depth of the information gathered, there is considerable opportunity for on-going analysis of the data to further explore, identify and model response towards VL gambling in order to gain additional insight as to the various underlying factors influencing play of video lottery games. Thus, the Nova Scotia Department of Health, Problem Gambling Services is able to maximize the continuing information return from this leading edge research on video lottery gambling.

# Summary:

Overall, the results of the study indicate that 5.7% of adults in Nova Scotia are involved in regular continuous play of video lottery gaming. These adults account for approximately 25% of all those who play VLT's each year in the province and contribute approximately 96% of the annual provincial net revenue for VL gambling.

The majority of Regular VL Gamblers (75%) appear to derive entertainment benefit from VLT play and do not report or manifest any long-term ill effects from VL gambling. However, the results suggest that at least 25% of Regular Players have had difficulties with their VL gambling, with at least one-third having attempted to stop and/or reduce their play levels at some time since they have started playing the machines.

The Problem VL Player segment identified in the current research comprises a distinct group of VL Gamblers in Nova Scotia. This group is strongly differentiated from other regular VL gamblers. Problem VL Gamblers in Nova Scotia presently comprise 16% of all of those who play the machines on a regular basis which translates to approximately 3.92% of all adults in the province. This group of VL Gamblers contributes just over half of the net revenue for video lottery gambling and, at any given time, will comprise almost half of all those sitting in front of a video lottery terminal in Nova Scotia. For the most

part, these adults report significant guilt and anxiety, are experiencing difficulties in coping and are at a loss as to how to control their VL gambling.

The results of the Problem VL Gambler Analysis suggest that there will not be any single treatment solution in addressing problem video lottery play. Prevention, intervention and treatment strategies will have to be as varied as the many factors impacting and contributing to problem VL gambling. By focusing on the specific behaviours, perceptions and characteristics of the individual, it may be possible to customize effective treatment approaches on a per problem player basis. The results of the current study can be used as input in designing and testing various models related to VL gambling treatment. Furthermore, the study results suggest that there are opportunities for harm minimization or harm reduction in terms of those adults who have not (yet) developed problems with VL gambling, but who may be at risk for problem play in the future.

The results of the Nova Scotia VL Players' Survey provide a comprehensive overview and profile of video lottery play in the province. A number of viable options in addressing problem VL gambling in Nova Scotia are identified, which can be further explored and tested. However, given the revenue contribution of Problem VL Gamblers, any "solution" may have significant implications for VLT revenues in the province.

### PROJECT OBJECTIVES

The primary objective of the project is to develop a comprehensive profile of VLT players in Nova Scotia, including:

- *proportion of players exhibiting problem gambling behaviour;*
- *demographic/characteristics of VL players and the subset of problem players;*
- *lifestyle;*
- *a delineation of risk indicators that will assist in designing prevention and treatment strategies.*

As the first comprehensive study of VL play undertaken in Nova Scotia, the results also provide benchmark measures against which VL play and subsequent intervention and harm reduction strategies/programs can be monitored and tracked. Therefore, it was also necessary to establish baseline measures of attitudinal, behavioural and psychographical response towards VL gambling within the context of all adults in Nova Scotia for comparison to VL Players. Rigorous standards in terms of data collection and methodology were incorporated into the study design to ensure data accuracy and reliability.

Based on an extensive literature review and pilot testing for the project, a questionnaire was specifically designed to address the study objectives.

### METHODOLOGY

To address the objectives of the study, two independent surveys were conducted by telephone with randomly selected adults in Nova Scotia from Oct. 12, 1997 to Jan. 19, 1998.

1. VL Players' Survey (n=711)
2. General Population Survey (n=400)

#### VL Player Survey:

During data collection, a random sample of 11,691 households in NS were initially contacted for participation in a household screening survey. The Household Screen consisted of a brief survey which identified the total number of adults (19+ years) in the household and VL play status for each adult. Of the

11,691 households sampled, a total of 9,339 households and 18,650 adults were successfully screened, yielding a response rate of 79.9% for the Household Screen. Within this sample, 927 Regular VL Players were identified and 711 (76.7% of all those qualified) completed the VL Players' Survey. The overall response rate for the survey was 61.3%. Thus, the results of the study are representative and generalizable to the population of Regular VL Players in Nova Scotia.

The VL Player interviews ranged from 30 minutes to 2 hours, with an average of ~48 minutes in length.

#### General Population Survey:

The General Population Survey was conducted with 400 randomly sampled adults in NS with a response rate of 61.1%. The interviews ranged from 13 to 29 minutes with an average length of ~18 minutes.

There were no significant differences between the two samples in terms of estimating the level and degree of adults' involvement in video lottery gambling in NS. This finding is compelling since different sampling techniques were used and, thus, provided convergent validity for the estimate of VL play activity by adults in Nova Scotia.

### \*\*\*KEY FINDINGS\*\*\*

The Key Findings for the study are presented under two primary sections:

- **Provincial Overview of VL Play**  
This section provides a summary profile of VL gambling within the context of the total population of adults in Nova Scotia.
- **Problem VL Gambler Analysis**  
This section provides a summary profile of those adults characterized as Problem VL Gamblers as compared to other regular VL gamblers in Nova Scotia.

More detailed information regarding questionnaire design, pilot testing, survey methods and results is available in the 1997/98 Nova Scotia VL Players' Survey - Technical Report.



## PROVINCIAL OVERVIEW OF VL PLAY

Involvement In Gambling Activities:  
For All Adults In Nova Scotia

	Ever Played (Trial)	Play in Last Month	Regular Play (1+/ month)
Lottery Draws	80%	59%	41%
Charity Raffles/Draws	65%	42%	13%
\$2.00 Scratch 'n Wins	39%	25%	10%
\$1.00 Scratch 'n Wins	41%	24%	10%
VLT's	38%	11%	6%
Breakopens	19%	9%	5%
Bingo in Bingo Halls	14%	7%	4%
Card Games (outside of casino)	13%	5%	3%
Slot Machines	27%	7%	2%
Sports Bets/Pool	6%	2%	1%
Sport Select Proline	4%	2%	1%
Non-slot Casino Games	9%	3%	1%
Horse Racing	3%	1%	<1%
Other Betting	1%	<1%	<1%

## General Gambling Activities Profile:

For the most part, playing games for money in Nova Scotia is a widespread and socially acceptable entertainment option. Almost all adults in the province (94%) have played at least one type of game offering money prizes at some time, and the strong majority (80%) have participated in at least one gambling activity in the last month. Just over half (54%, or =367,000 adults) gamble on a regular monthly basis.

- Participation in lottery draws is the most popular gambling activity, both in terms of trial (80%), play in the last month (59%) and regular play (41%).
- Nova Scotians are also highly likely to have ever purchased charity raffles or draw tickets (65%) and,

typically, 42% of adults buy these charity draw tickets in a given month. Due to fluctuations in the availability of charity tickets, on-going regular play for these games tends to be substantially lower than for ALC draw tickets (13% versus 41%).

- Trial (ever played) of \$1.00 (41%) and \$2.00 (39%) instant scratch 'n win tickets and VLT's (38%) by adults tends to be similar, however, both play in the last month (=25% versus 11%) and regular play (10% versus 6%) tends to be twice as high for the instant tickets than for VLT's.
- It is noteworthy that trial of slot machines exceeds that noted for bingo in bingo halls by almost a factor of 2 (27% versus 14%). A similar percentage of adults have been involved in either gambling option in the last month (7%). Primarily due to the restriction of slot machines to the two casino locations in Nova Scotia (Halifax, Sydney), regular on-going play of slot machines tends to be lower than that noted for bingo (2% versus 4%).
- The majority of other gambling options available in Nova Scotia have been tried by fewer than 15% of adults and elicit regular playing patterns from 3% or less of the adult population.
- On average, adults in Nova Scotia spend approximately \$41.70 each month (out-of-pocket) on gambling activities and an additional \$83.31 on other entertainment expenditures. This suggests that approximately one-third of adults' monthly entertainment expenditures are allocated to gambling expenditures.

Despite the fact that only 11% of adults play VLT's each month, average monthly expenditures per capita in Nova Scotia tend to be at least twice as high for video lottery gambling than for any other gambling activity (\$14.39 per adult per month). In fact, VLT's account for approximately 35% of all out-of-pocket gambling expenditures and 11.5% of total gambling and entertainment expenditures by adults in Nova Scotia. Thus, the results indicate that a small proportion of adults in Nova Scotia (VLT players) are contributing a significant portion of gambling revenues in the province.

### VIDEO LOTTERY PLAY BY ADULTS IN NOVA SCOTIA

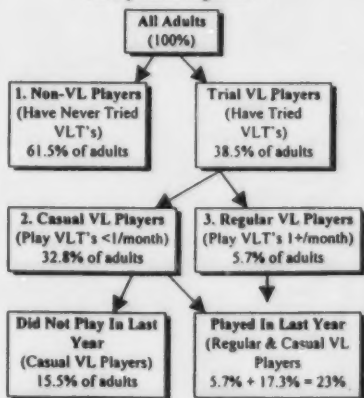
Measures of video lottery gambling historically have been included in studies initially designed to measure other regulated gambling activities, primarily lottery ticket play. More precise measures specifically related to VL gambling were developed for the current study and the results suggest that these measures are significantly more valid for determining VL play estimates than those used previously. The results reveal that VL gambling is markedly different from other gambling activities such as lottery draws, bingo or sports betting, which are most often tied to specific play times or schedules, with a delay between the actual purchase/play and outcome. These factors directly influence play levels and exert some control on play. Video lottery gambling, however, is continuous, accessible and the schedule of play, for the most part, is self imposed, with no definable start/finish time for play within the proscribed hours of operation for licensed establishments in Nova Scotia.

- ~38.5% of adults 19 years of age or older in Nova Scotia have tried video lottery gambling at some time (Trial Players).
- ~23% of adults have played VL games within the last year. This suggests that 60% of all Trial VL Players have played the games at some time during the past twelve months.
- ~11% of adults, typically, play video lottery games each month. This suggests that approximately 29% of all those who have ever tried VL games (Trial Players) will have played VLT's in the last month.
- ~5.7% of Nova Scotian adults play video lottery games on a regular, continuous basis (1+ times per month). This suggests that approximately 15% of all those who have tried video lottery games adopt regular playing patterns. Regular VL Gamblers comprise approximately half of those who play video lottery games each month.
- ~4.5% of Nova Scotians (~31,000 adults) are categorized as Lapsed Regular Players, or adults who used to play regularly (once per month or more) at some time in the past, but currently play once every few months or less often. (It is crucial that studies of these lapsed players be conducted to determine the measures and strategies used to curtail their gambling.)

- It appears that 1.4% of adults stopped playing over the last year, primarily due to concerns about addiction or spending too much money. This was offset by an additional 1.3% of adults who started playing a regular basis during the last twelve months. Therefore, it can be estimated that there is a relatively high amount of churn (turnover in the percentage of adults playing regularly) within the Regular VL Player base in Nova Scotia, with approximately 25% of Regular Players ceasing play and a similar proportion taking up regular playing patterns.
- Despite the degree of player turnover, on average, current Regular VL Players have been playing the games on a regular basis for 3.6 years, suggesting regular playing patterns for VL gamblers are fairly entrenched for these adults.
- For approximately one-quarter of all Regular VL Players, it appears that factors other than game appeal or liking are contributing to regular play levels. The fact that 25% of Regular VL Players dislike VL gambling, as compared to other gambling options, yet continue to play heavily, is of concern as it suggests their behaviour is motivated by habit (or compulsion) rather than enjoyment or preference for the activity.

#### Segmentation Analysis:

##### VL Population Segments



To identify the characteristics and behaviours associated with video lottery gambling in the province, all adults were segmented into one of three groups for comparative profiling:

### 1. Non-VL Players:

- 61.5% of adults in Nova Scotia;
- average monthly expenditure on VLT's = 0;
- includes those who have never tried VL games and, thus, are not currently being targeted for play. This group is at low risk for VL play because they have not tried video lottery gambling and, for the most part, are unlikely to do so. However, there may be adults within this segment who would be vulnerable to VL play if they tried the games or if there were any changes in distribution strategies or management of VLT's in Nova Scotia. While these adults have no personal experience with play, in some cases, they will be exposed to VLT's indirectly through involvement by others. Non-VL Players comprise the majority of adults in Nova Scotia and, thus, due to their relative size, will exert considerable influence on public opinion towards VL gambling. Furthermore, evidence suggests they also account for half (51%) of those seeking information or assistance to help others with VL problem gambling.

## 2. Casual VL Players:

- 32.8% of adults in Nova Scotia;
- average monthly expenditures on VLT's = \$1.29;
- includes those who have tried video lottery games at some time, but are not playing on a regular basis. While they comprise the majority of the target market for video lottery gambling (~85%), these adults do not currently have regular playing patterns and, thus, may differ significantly in terms of behaviours, attitudes and demographic characteristics for VL gambling in particular, and for other types of gaming/gambling in general. Over the last year, approximately half of these Casual Player actually played the games (17.2% of adults). While Casual VL Players comprise approximately 75% of all those who have played video lottery games in the last year, they account

for only 4% of total annual VL revenue in Nova Scotia. Currently, Casual Players can be characterized as social players, although some have deliberately reduced play or stopped playing, either due to changes in lifestyles or in order to control their play of the games.

### 3. Regular VL Players:

- 5.7% of adults in Nova Scotia;
- average monthly expenditure on VLT's = \$243.52;
- includes those adults who play video lottery games on a regular, continuous basis (once a month or more). Therefore, while these adults represent only approximately 25% of those who played VL games in the last year, they are contributing the majority of revenue generated from VL gambling in Nova Scotia (~96%). Consequently, Regular VL Gamblers are at greater risk for developing problems with VL gambling due to the frequency and volume of play and will require markedly different intervention strategies than the Casual Players.

#### Demographics Characteristics:

A comparison of demographic profiles between Regular VL Gamblers and the rest of the adult population found that Regular VL Players tend to have the following characteristics:

- more likely to be male (62% versus =48%);
- are younger, primarily under 40 years of age (61% versus =45%), although it is noteworthy that those aged 19 - 24 years are over twice as likely to be Regular VL Players than those in any other age category (18% versus 2% - 9%);
- have lower education levels (high school education or less: 51% versus =43%; university or post graduate degrees: 9% versus =19%);
- more likely to be single (32% versus =15%); although over half are married (57%), this is significantly lower than for other adults in Nova Scotia (=75%);
- more likely to live in multi-adult households without children (48% versus =30%).

This profile corresponds with people who are socially active outside the home, spend more time at bars and locations where the machines are found, are less religious and, therefore, more likely to be tolerant of gambling. The majority (73%) are employed, primarily in blue collar (35%) or grey collar (24%) occupations and, thus, have access to a pay cheque in order to support the activity.

Given these demographic characteristics, it is reasonable that these individuals are more likely to be regular players of VLT's.

These are not necessarily the demographic characteristics associated with problem VL gambling. However, the demographic analysis of regular and problem VL play provides insight as to particular groups at potentially greater risk for developing problems with play.

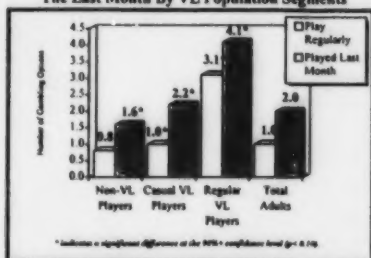
#### Involvement In Other Gambling:

Results suggest Regular VL Players are the "consummate gamblers" in Nova Scotia. This group of adults appears to be attracted to games of chance played for money to a much larger degree than for other adults.

- Compared to other adults, Regular VL Players are significantly more likely to be regularly involved in almost all other gambling options in Nova Scotia, including:

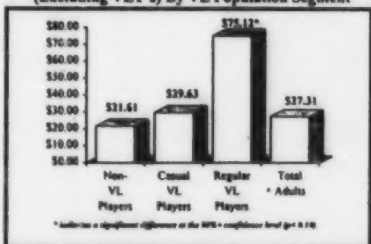
- lottery draw tickets (61% versus 40%);
- \$2.00 scratch 'n wins (36% versus 9%);
- \$1.00 scratch 'n wins (33% versus 8%);
- breakopens (14% versus 4%);
- bingo in bingo halls (13% versus 4%);
- card games (outside of casinos) (9% versus 2%);
- slot machines (7% versus 1%);
- Sport Select Proline (7% versus 1%);
- sports bets/pools (6% versus 1%);

Number of Gambling Options Played Regularly & In The Last Month By VL Population Segments



- Regular VL Players participate in more gambling options in a given month (4.1) and on a regular basis (3.1);

Total Average Monthly Gambling Expenditure (Excluding VLT's) By VL Population Segment



- Regular VL Gamblers also spend substantially more than other adults in Nova Scotia on gambling activities, excluding VLT's. In fact, Regular VL Players, on average, spend 60% more than any other adults and allocate approximately 24% of their current gambling dollars to play of other, non-VLT gambling options.

As a whole segment, Regular VL Players are interested in most forms of gambling. It is not known how much they spent on other games prior to playing VLT's, nor is it known how much they would spend on alternative gambling options if their access to video lottery gambling were restricted. It is possible that many Regular VL Players switched expenditures to VLT's from other forms of gambling once the machines became available, or as they developed regular playing patterns for video lottery. It may be that a large portion of their gambling budget would be switched back if their VL gambling were curtailed.

#### Accessibility To VLT Machines:

Currently, VLT machines are restricted to licensed establishments in Nova Scotia, with approximately 3,225 terminals distributed throughout the province:

- typically, 30% of all adults in Nova Scotia go to licensed establishments on a regular basis of once a month or more. Regular VL Players are over twice as likely as Casual VL Players to be in a bar location each month (88% versus 40%), with only 20% of Non-VL Players in a licensed establishment once a month or more;
- 12% of Regular VL Players do not frequent bar locations regularly and, thus, a sizable proportion are playing the machines at other types of locations (e.g., restaurants, native gambling establishments), with 3% indicating regular play at private locations which do not serve alcohol (illegal locations);
- Regular VL Players only account for 17% of all adults who go to a bar location each month, yet, given their greater frequency of patronage, they will comprise 33% of all those in a bar/pub/club or lounge in Nova Scotia on any given day;
- on average, Nova Scotians are typically in at least three locations which offer VLT's each month. Regular VL Players are in these locations, on average, 10.8 times each month versus only 4.4 for Casual VL Players and 2.2 for Non-VL Players;

- of all the times Regular VL Players are in locations which have VLT's, on average, they will play the machines just over half of the time (57%). Only 25% of the times they are at a VLT location is to specifically play the games. Regular Players are more inclined to play on impulse, that is, they have gone to a VLT location for other reasons (e.g., to socialize, play darts, play pool), and in 32% of the cases, they end up playing VLT's as well. This means that, on average, over half (56%) of the times they play video lottery, it is on impulse "because the machines are there and available for play;"

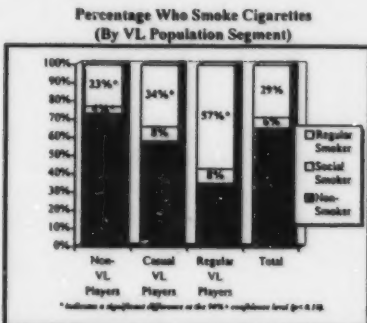
- 34% of Regular VL Players tend to play VL games every time they are in a location which has VLT's. The incidence of "every time" players tends to be higher for those Regular VL Gamblers in the following segments:

- 55 years of age or older (59%);
- those living in single person households (50%);
- those who are separated/divorced/widowed (50%);
- those with lower household incomes (<\$25,000: 42%);
- those with lower education levels, especially compared to those with university degrees (38% versus ~27%).

While these adults do not necessarily represent Problem VL Gamblers, it appears that Regular Players in these demographic segments are at greater risk for having problems in managing their play and, thus, may benefit from assistance in controlling their VL gambling when exposed to the machines at VLT locations.

It is noteworthy that while impulse play contributes to the frequency of play for Regular VL Gamblers, the evidence suggests planned play (i.e., those who are at the location to specifically play the machines) is more strongly associated with problem VL gambling. Thus, opportunities exist to intervene or interrupt playing patterns, as the decision to play is often made before the VL Gambler is in front of the machine.

### Smoking Habits:



There is a strong relationship between VL gambling and smoking in Nova Scotia:

- although only 29% of Nova Scotia adults smoke on a regular basis, and 6% "light up" on a social basis, the majority of Regular VL Gamblers are smokers either on a full-time (57%) or part-time basis (8%);
- 62% of Regular VL Players smoke while they are playing VLT's and 20% smoke more than usual. This means one-third of those Regular VL Players who smoke are doing so more heavily while playing video lottery games;
- fewer non-smokers frequent licensed establishments on a regular basis (25% versus 40% of smokers), therefore, the results suggest that in Nova Scotia, more smokers have access to play of VLT's than non-smokers.

Given the tendency for Regular VL Players to be smokers, it might be speculated that limiting the machines to smoke free areas may reduce the amount of time Regular Players would devote to play of the games. It may be argued that such a move might serve to counter the greater access smokers have to the machines by virtue of where the VLT's are located (bars/pubs/lounges). To some extent, this may be effective in reducing play for a significant portion of

players, however, it is noteworthy that the incidence of problem VL play does not differ significantly for those Regular VL Players who smoke (18%) or are non-smokers (14%). (Since smokers comprise a larger proportion of Regular VL Players, they will also make up a larger proportion of Problem Players, but they are no more likely than non-smokers to develop problem play of the games).

### Drinking Habits:

For the most part, Regular Video Lottery Players are not drinking frequently or heavily when they play the games:

- 26% *never* drink alcoholic beverages when they are playing;
- for the 74% of Regular VL Players who do drink while playing VLT's, almost half (47%) do so only rarely or on an occasional basis, essentially drinking less than 50% of the time they are playing;
- only 22% of Regular VL Players *always* drink and 17% *frequently* partake of alcoholic beverages during VLT play;
- 24% indicated that they have ever played the games when they would have considered themselves to have been intoxicated (had too much to drink).

In general, Regular VL Players do not play when they feel they have had too much to drink. This suggests that Regular VL Players want to be focused on the game and that they believe, for the most part, drinking either "eats up" resources that can be used for VL gambling or that it interferes with their ability to play and manage their play of the games. Fourteen percent (14%) of all Regular VL Players indicate that alcohol plays a role in those situations when they tend to exceed their budgets or spend more time and/or money on VL gambling than they intended. Comments centered on the greater tendency for players to bet at higher levels or take greater risks when betting. In most cases, this results in players spending their "VL money" faster. For others, there is a tendency to spend more or "too much." As a result, most players tend to avoid excessive drinking, or alcohol in general, while playing VL games.



**VL Gambling & Entertainment Expenditures:**

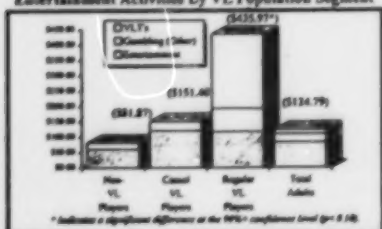
Given the continuous nature of play and easy accessibility of video lottery gambling, it is difficult for players to keep track of their expenditures. This is one of the key factors contributing to players' problems in managing their VL play. Consequently, weekly or monthly estimates by players as to the amount they spent on VLT gambling will often vary from actual expenditures. However, players find it relatively easy to provide out-of-pocket estimates of expenditure on a per play basis, as it is more relevant to their actual play behaviour and experience.

- "I usually put \$20.00 into the machine when I sit down and I play until I lose it."
- "I spend \$5.00, one loonie at a time."
- "It varies, but usually I end up spending about \$30.00 of my own money every time I play the machines--sometimes you get really lucky though."

By applying per play estimates to the actual number of times they played in the last month, it is possible to derive expenditure estimates based on amount spent rather than amount wagered. This has proven to yield more accurate estimates of net revenue for video lottery gambling.

The results suggest that net VLT gambling revenues in Nova Scotia for 1997/98 will be approximately \$117,336,923 which represents an estimated increase of approximately 16.7% over last year (source: NS Alcohol & Gaming Authority 1996/97: \$105,929,806). (Note: According to 1997/98 figures recently released, the derived estimates are within 2.5% - 3.5% of actual revenue.)

**Average Monthly Expenditure On Total Entertainment Activities By VL Population Segment**



- Regular VL Players, on average, are spending almost three times as much money as Casual VL Players each month on entertainment and gambling activities (\$435.97 versus \$151.40) and five times as much as Non-VL Players (\$435.97 versus \$81.87);
- there is no difference in the amount Casual and Regular VL Players spend on general entertainment expenses (\$120.48 versus \$117.33). Therefore, the primary difference between expenditures in these segments is due entirely to higher gambling expenditures by Regular VL Players;
- Regular VL Players, on average, spend \$243.52 each month on video lottery play, as compared to \$1.29 per Casual Player in Nova Scotia;
- by definition, Casual VL Players are comprised of those who do not play VLT's every month. Those Casual VL Players who have played in the last month, on average, spend approximately \$8.05 which is still substantially lower than the monthly expenditures for Regular VL Gamblers (\$243.52). Casual Players make up approximately half of those adults who play VLT's in Nova Scotia each month (~5% of adults) and comprise 75% of all those who played in the last year, yet they only contribute approximately 4% of the total revenue derived from VL gambling;
- Regular VL Gamblers comprise 25% of those who played VLT's in the last year and contribute approximately 96% of the revenue for the games;
- on average, Regular VL Players dedicate 73% of their total monthly entertainment expenditures to gambling activities, with more than half (56%) of their entertainment dollars exclusively spent on video lottery gambling.

When expenditures are calculated on an individual basis rather than averaged across all Regular Players, it was found that 36% of Regular VL Players are spending the majority (50%+) of their entertainment funds on video lottery gambling each month, with approximately 78% allocating less than 50%. In fact, almost half (49%) of all Regular VL Players spend less than 30% of their entertainment expenditures on video lottery, suggesting that there are significant differences in expenditure patterns within the Regular VL Player base in Nova Scotia.

**Efforts To Control Play (Self & Others):**

- 2% of all adults in Nova Scotia had someone else express concern about the amount of time and/or money they were spending on VL games;
- Regular VL Players are more likely to have been approached by concerned friends and family members (18% versus ~2%). However, Casual VL Players comprise half (51%) of all those who have had someone else intervene or comment on their play. This intervention by a significant person in their life may have contributed to a Casual Player adopting less regular play levels and, ultimately, achieving success in managing his/her play;
- although 2% have been warned by someone else, over twice as many (5%) have had personal concerns regarding their VL play. Again, Regular VL Players are significantly more likely to report they have been worried about the amount of time or money they spend on VL gambling (25% versus ~5%);
- 25% of all Regular VL Players have purposely tried to stop playing for an extended time period, with only 12% able to successfully interrupt their play;

- 12% of Regular VL Players continually try to stop playing VLT's at least once every few months, with 7% indicating they try to stop every time they play;
- 29% of all Regular VL Players have tried to reduce their play levels at some time in the past, with only 8% indicating success in their efforts;
- 17% of Regular VL Players try to reduce their VL gambling at least once every few months, with 8% indicating they try to reduce their play every time they are in front of the machines;

When both efforts to stop or reduce play are considered, one-third (34%) of Regular VL Players have tried to manage their VL play and only 16% were able to successfully resolve their concerns (although it is noteworthy that all of these players are still playing VLT's on a regular monthly basis). Thus, the results suggest that many Regular VL Players move in and out of problems with their VL gambling during the course of their play.

**Summary**

The participants identified several things they felt could lead to problem play with VLTs. They thought of the bonus as troublesome, because some players would "chase" it and end up spending much more than the bonus was worth. Additionally, playing for the bonus meant betting at a maximum level, and this led to an increase in wagers, and often, quicker losses. Several participants were very concerned over the introduction of bill validators on the machines. One noted that he played a machine in Newfoundland with a bill validator and it led him to overextend himself much more quickly.

All stated there was no way for them to track their time or expenditures, and this was a problem because they became too involved in the games. They claimed to have an idea of how much time and money they were spending, but intricacies of play, such as missing a win by one card or a single character, would entice them to spend more. Once they had finished playing, they then became aware of how much time and money they had spent, but had often exceeded their limits.

The participants indirectly perceived the speed of play, lights, and sounds as leading to problems for some players. Those who play "line games" use the stop button to speed up the decision of a wager, which inadvertently speeds up the process of playing. This can lead to quicker losses. Moreover, sounds and lights associated with a large jackpot were also considered to cause some to continue playing when they were getting ready to stop. The participants felt both the stop button and "bells" led many people to overextend themselves while playing.

We have hypothesized that problematic VLT play is at least partially a function of myth and gamblers' fallacies. The participants all appeared to believe that there was some chance of influencing the machines, especially with card games. Additionally, they did not appear to understand the randomness of the play.

# PROBLEM VL GAMBLER ANALYSIS

The primary purpose of the Problem VL Gambler Analysis is to identify the distinctive characteristics and behaviours of those Regular VL Players who are experiencing difficulties with video lottery gambling, in order to gauge and evaluate the nature and causes of problem play. The Regular VL Players were segmented into three groups and a comparison among Infrequent, Frequent and Problem VL Gamblers was undertaken to identify possible causes and risk factors associated with problem play.

## Identification Of Problem VL Gamblers:

Current VL Players were classified as Problem VL Gamblers based on the results of three independent measures:

1. A derived multi-item attitude score of 16+ on 6 key statements associated with problem VL gambling (based on pilot testing);
2. A rating of 5 or higher on a 10-point scale, where 1 means "your" VL play is not at all a serious problem, and 10 means "your" VL play is a serious problem (self-designated score);
3. Respondents' indication that they have ever spent more time or money playing VL games than they should, and that the problem is still unresolved or only partially resolved (self-designated score).

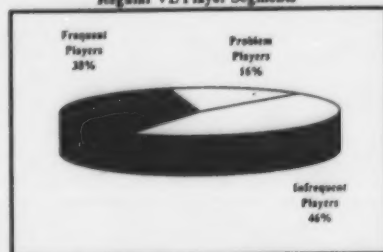
Respondents had to qualify on at least two of the three measures before being included in the Problem VL Gamblers segment. There were 105 Regular VL Players who met this nominating criteria. There were twelve respondents who did not qualify on the first two measures, yet stated unequivocally they are currently experiencing problems with their VL play and have not yet resolved the problem. Given these players' perceptions of their VL gambling, it was decided these individuals must be included in the Problem VL Gamblers segment.

The remainder of the sample was divided into two segments, based on their frequency of play over the past three months: those who played three times per month or less, and those who played four times a month or more. Those who played less than four times a month were designated the Infrequent Player segment; those who played four or more times a month comprise the Frequent Player segment.

	Infrequent Players	Frequent Players	Problem Players
Sample Size	327	267	117
% of Regular Players	46%	38%	16%
Average Number of Times Played per Month	1.6	7.2	8.0

The Frequent VL Player segment meets the criterion of playing, on average, as frequently as Problem Players. Thus, the actual play levels between the two segments are the same and it will be other factors such as attitudes or play patterns that will differentiate the groups.

Regular VL Player Segments



Based on player perceptions regarding their VL play, the segmentation approach used in the current study appears to be successful in grouping the Regular Player base into the two segments that exhibit few symptoms of problem VL play (the Frequent and Infrequent Players) and the one segment of those players exhibiting problems with VL play:



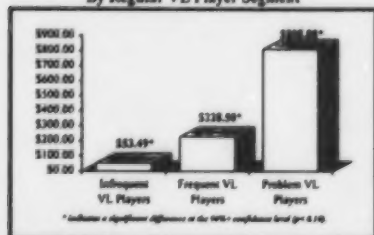
Perception	Total VLT Players (n=711)	Infrequent Players (n=327)	Frequent Players (n=267)	Problem Players (n=117)
Percentage of Regular Players	100%	46%	38%	16%
Still have a problem spending too much <u>money</u> on VL play	16%	1%†	3%†	85%
Still have a problem spending too much <u>time</u> on VL play	14%	1%†	4%†	79%
Still have a problem spending too much <u>time</u> and/or <u>money</u> on VL play	17%	2%†	3%†	91%
Those who rate their problem 5+ on a 10 point problem scale	14%	2%	4%	75%
Someone else feels they have a problem	18%	5%	13%	68%

† VL Players indicating partial resolution of time and money problems were not automatically included in the Problem Player Segment.

#### Problem VL Gambler Segment:

Problem VL Gamblers currently comprise 16% of the Regular VL Player base, representing 0.92% or approximately 6,400 adults in Nova Scotia.

Average Monthly VL Expenditure  
By Regular VL Player Segment



- on average, Problem VL Gamblers spend 3.5 times more than Frequent VL Players and 15 times more than Infrequent VL Players each month on VL gambling;
- the fact that Problem VL Gamblers' monthly VL expenditure is at least 250% higher than any other Regular VL Player means this segment accounts for a disproportionate amount of the revenue derived from VLT's in Nova Scotia;
- overall, Problem VL Gamblers account for approximately 4% of all those who played VLT's in the last year, yet contribute approximately 53% of net revenue for video lottery gambling in Nova Scotia. On average, these players each spend

approximately \$9,706.56 on an annual basis and, collectively, contribute approximately \$62 million in VL revenue to the province;

- while the Problem VL Gambler segment comprises 16% of the Regular VL Players in Nova Scotia, there is an additional 9% of Regular Players who indicate they have had problems with their VL gambling in the past, but have subsequently resolved their problem.

The majority (75%) of Regular VL Gamblers appear to derive benefit from the entertainment value of the games without suffering any lasting ill effects. However, there is undoubtedly a sub-segment of Regular Players who have or have had difficulties with their VL gambling.

#### Demographic Characteristics of Problem VL Gamblers:

There are not large skews in the demographic characteristics of the Problem VL Players when they are compared to other Regular VL Players. Problem VL Gamblers are not more likely to be unemployed. Their work status and occupation status profiles are very similar to other VL players.

- compared to other Regular VL Players, they are less likely to be aged 19 to 24 or over 60 years of age, to be students or homemakers, to be in households with 3 children, to be in households with five or more persons, and to have annual income levels between \$35,000 and \$45,000 or over \$75,000;

- compared to other Regular VL Players they are more likely to have less than grade nine education, to be aged 50-59, to be living in two adult households with no children, and to be separated/divorced/widowed.

Most of these demographic segments are small (5% - 14% of all VL players) and do not cause a large shift in the profile of Problem VL Gamblers compared to the other Regular Players. However, these groups may be particularly vulnerable to problems with VL gambling and may require targeted and/or different intervention or treatment strategies than other population segments. The only large segment associated with a greater likelihood of being a Problem VL Gambler are those players living in two adult, no children, households. The largest demographic segment with lower probability for being a Problem VL Gambler are those Regular Players who are 19-24 years of age.

This means that, for the most part, the profile of Problem VL Gamblers in Nova Scotia is very similar to the profile of Regular Players in the province. For example, as males comprise two-thirds of the Regular Players, it is not surprising men also make up two-thirds of the problem players. Therefore, those requiring immediate assistance for VL gambling problems are most likely to be comprised of the following:

- males (65%);
- slight majority are under 40 years of age (55%), however, Problem VL Gamblers fall fairly evenly across all age categories from 19 - 59 years;
- the majority (76%) are employed on either a full-time (61%) or part-time (15%) basis, primarily in blue collar occupations (42%);
- have no children in their households (65%);
- have lower education levels, particularly high school or less (58%);
- have household incomes under \$45,000 (61%).

#### Lifestyle Factors:

The lifestyle of Problem VL Gamblers includes more passive TV watching than any other segment and includes less social interaction with friends and relatives and involvement in hobbies, sports or other interactive activities. Gambling and/or entertainment options like

VL games, which are very passive, non-physical and non-social, fit their lifestyle profile very well. Alternative activities that appeal to a person with this lifestyle profile would have to be identified as viable substitutes for VL gambling.

#### VL Play Behaviours & Attitudes:

Problem Players are more likely to have incorrect beliefs about the odds of winning when they play; more likely to exhibit superstitious behaviour; and more likely to believe they can control or influence the play of the machines.

Contrary to previous reports, significant numbers of Problem Players often play VLT games with other VLT players, utilizing either one or more than one VL machine. At any point, during the day or night, at least 48% of those "occupying stools" in front of VLT's in licensed establishments are Problem Players. There are some days and times when 58% (or more) of the available VLT's are occupied by Problem Players. These include any VL machines on Sunday through Wednesday, and on any day from 10:30 a.m. to 7:00 p.m.

Problem VL Gamblers differ significantly from other Regular VL Players in terms of how they play VLT's:

- while Frequent VL Players, on average, play the games just as often ( $\approx 8.0$  times/month), the median time spent playing VL games is 150% higher for Problem VL Gamblers (5 hours versus 2 hours per week) or an extra 12 hours per month;
- compared to other Regular VL Players, Problem Players, on average, spend 2.5 times longer at the machines each time they go to play (189 minutes versus 63 minutes);
- on average, Problem VL Gamblers bring significantly more money to the location to specifically spend on VLT's and 81% usually end up spending all of these funds each time they play;
- they bet at higher levels, more often betting at maximum levels; are more likely to play until they run out of money and then are more likely to obtain additional funds for continued play;
- chasing losses is a significant contributor to problem play and Problem VL Gamblers are more likely to exceed their budget or intended expenditures to win back money they have lost;

- just over half (52%) frequently or always have trouble quitting while they are ahead. They reinvest more of their VLT winnings on continued play, thus, the amount paid out to these players may be substantially lower than the average of 72% of total VLT wagers typically paid out as prizes (†Source: NSAGA 1996-97 Annual Gaming Report);
- they tend to have distinct emotional, physiological and behavioural responses towards play of the machines which can assist in identifying Problem VL Gamblers in the field (e.g., Problem Players will comprise ~76% to 86% of those observed to be groaning, kicking or talking to the machine, swearing, cursing or yelling while playing VLT's);
- they more often lose track of time while playing;
- the majority recognize they are losing (73%), yet this does not appear to influence the attitudes for many concerning their future chances of winning. They tend to rely on superstitious behaviour to change their luck;
- they believe they are more skilled in the play of the games and, thus, can influence their chances of winning through their ability to control the play of the game.

Any attempts to reduce problem play will have to address changing the beliefs and actual play behaviours of Problem VL Gamblers, as well as reducing the game's effect on their arousal levels while they play. This suggests focusing attention on a combination of factors contributing to their play behaviours, including the machine/game designs, situational factors impacting play and the individual's perceptions and motivations. Specifically, efforts should include reducing the perceived value of superstitious behaviour, limiting their perceived ability to influence the outcome of their play, changing perceptions about the odds of winning after a loss, and reducing factors that lead to, and facilitate, chasing of losses.

#### Coping Strategies:

Problem VL Gamblers are concerned about an inability to control their own problem play:

- only one-third (33%) feel they personally could stop playing VLT games anytime they want, as compared to 85% of other Regular VL Players;

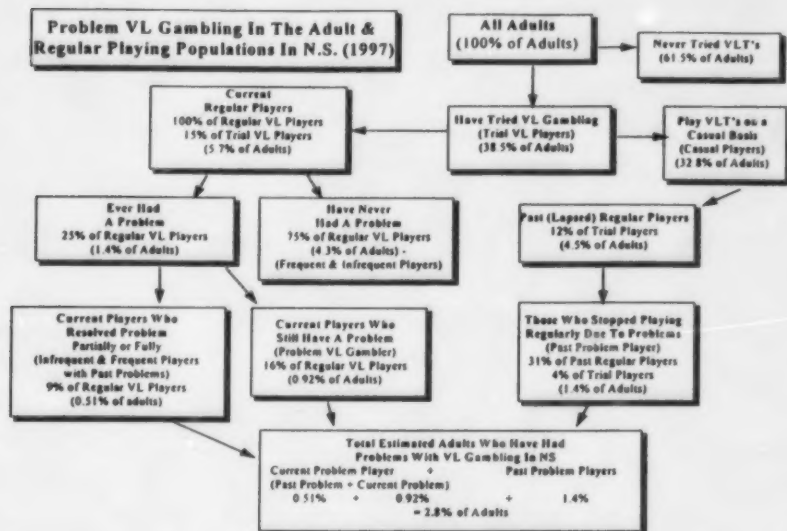
- 76% of Problem Players have either temporarily stopped or tried to stop playing at some time in the past, with 79% having tried to at least reduce their play levels;
- 56% of current Problem VL Players report they continually try to stop playing VLT's at least once every few months;
- 78% indicate they support the restrictions of VL machines to three or four locations in Nova Scotia, as compared to only one-third of other Regular Players supporting this measure.

There are a variety of coping strategies Regular VL Players have found to be successful in assisting them to manage or regain control of their VL gambling, including:

- setting and maintaining a budget for play;
- restricting access to additional funds for continued play (i.e., leave bank cards at home, only bring budgeted amount);
- enlisting the aid of a spouse, friends and/or family in ensuring a budget for play is maintained (i.e., do not borrow, have financial accounts in spouse's name or under spouse's control);
- participating in other activities;
- reducing time spent playing/budgeting time;
- avoiding/minimizing exposure to the machines;
- quitting play altogether.

The key differences in effective control mechanisms between Regular VL Players who are successful in managing their VL play versus Problem VL Gamblers tends to be related to willpower and self control when exposed to the machines. Abstinence and budgeting strategies are judged to be most effective by the Problem Players themselves, but they invariably have difficulty maintaining either strategy once exposed to play. It is noteworthy that coping strategies addressing actual play behaviour (e.g., betting strategies, quitting while ahead) are not mentioned by Problem VL Gamblers. The results suggest this may be a critical area for consideration in the development of harm minimization and harm reduction strategies.

**Problem VL Gambling In The Adult & Regular VL Playing Populations:**



The above diagram illustrates the current playing patterns for video lottery in Nova Scotia based on the combined results of the Regular VL Players Survey and the General Population Survey.

To estimate the extent to which video lottery play is associated with problem VL gambling in the province of Nova Scotia, those experiencing both current and past problems are considered. Three groups were identified and used to derive the estimate:

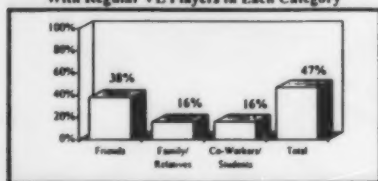
1. **Current Problem Gamblers (0.92% of Adults)**
  - those who are currently playing video lottery on a regular monthly basis and are categorized as Problem VL Gamblers.

2. **Current Past Problem VL Gamblers (0.51% of Adults)**
  - those who are currently playing video lottery on a regular monthly basis and, in the past, have experienced problems (self-declared) with VL gambling which they have since resolved.
3. **Lapsed Past Problem Players (1.4% of Adults)**
  - those who, in the past, played video lottery on a regular monthly basis and stopped playing regularly due to problems associated with their play (self-declared problem gamblers).

Based on these results, the estimate of problem VL gambling, past and present, would be approximately 2.8%, or approximately 19,000 adults in Nova Scotia, who at some time have been personally involved in problem VL play.

Public Perception Of Problem Gamblers:

Percentage of All Adults Who Have Contact With Regular VL Players in Each Category



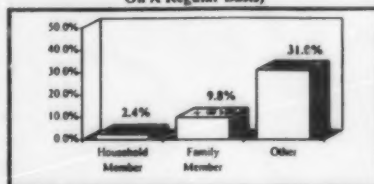
Overall, 47% of all adults in Nova Scotia (~320,000) report having fairly close personal contact with someone who plays VLT's on a regular basis. Almost 90% of these same adults (42% or ~285,000 adults) believe they personally know of someone who is experiencing problems with this type of gambling.

Estimates of problem VL play based on projections from adults in the general population will tend to grossly exaggerate the incidence of Problem Players in the province for two reasons:

- there will be a tendency to over-count, as several people can be aware of one Problem Player, and;
- the identification of problem play may be based on hearsay, as opposed to actual behaviour.

However, when adults are asked to specifically refer to problem VL gambling within their immediate households, the estimated incidence of problem play is almost identical to that noted for the derived estimate of problem play based on the results of the VL Players' Survey.

Relationship To Problem VL Gamblers by Category (For Those Who Do Not Play VL Games On A Regular Basis)



- based on the reported incidence of problem VL play for household members, 2.4%, or approximately 15,400 adults in Nova Scotia who do not play VL games on a regular basis (Non-Regular VL Players), report they are currently living with someone who has or has had a VL gambling problem. Almost 20% of these adults are including their own past play of the games and, in 25% of the cases, there is more than one Problem VL Gambler in the household. This increases the estimate to approximately 2.5% to 3.0% of Nova Scotian adults.

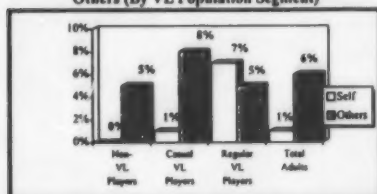
Having individuals estimate the incidence of problem VL play by adults outside their immediate households does provide an indication of the extent to which VL play is associated with problems by the general population. It also indicates the magnitude of the impact a small proportion of Problem VL Players may have on adults in general in Nova Scotia:

- in total, 31% of those who do not play VL games on a regular basis themselves report having friends or acquaintances who have problems with VL gambling. Thus, for the majority of adults, problem play tends to have less direct impact on their lives;
- 9.8% of Non-Regular VL Players in Nova Scotia report that one or more people in their households, or related to their immediate families (including siblings, parents, grandparents, extended family), have a problem with VL gambling, thus, the impact for these adults is more direct and personal.

Overall, the results suggest that for every current and past Problem VL Gambler in Nova Scotia, approximately 3.3 other adults in the province are directly affected, with an additional 10 adults reporting indirect impact.

#### Profile Of Those Seeking Help:

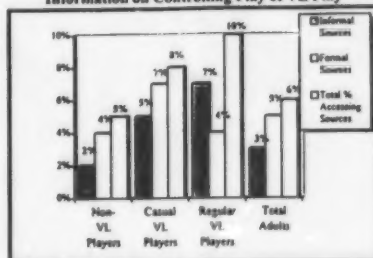
##### Those Who Have Ever Sought Assistance For Self Or Others (By VL Population Segment)



Overall, 6% of all adults ( $n=40,800$ ) in Nova Scotia have sought assistance and/or information for help in controlling video lottery gambling at some time. Primarily, it is the play of others which is motivating adults to seek assistance:

- approximately 83% of all those who have sought VL gambling assistance were doing so in an attempt to help others with their VL play;
- 5% of those who have never played VL games (Non-VL Players) have sought assistance for others. This group represents approximately half of all those who have accessed information or support services. This has significant implications for program interventions, as 50% of those who have sought assistance for others are unfamiliar with VLT technology and player characteristics;
- 10% of Regular VL Gamblers have attempted to get help or information on VL gambling, with 80% of these players motivated to do so by their own play and 55% seeking assistance for other Regular VL Players. This means that just over one-third (35%) of those Regular VL Gamblers seeking help have done so both for themselves and other players they know. Thus, Regular VL Gamblers will often be a source of information and/or assistance for other players when trying to manage VL play.

##### Sources Accessed to Obtain Help or Information on Controlling Play of VL Play



To identify any differences in the types of sources accessed to obtain information on problem VL gambling, potential sources were segmented into the following two groups:

- **Informal Information Sources** - including spouse/partner, other family members/household members, employers/colleagues/co-workers, friends;
- **Formal Information Sources** - church/religious groups, doctor/therapist, gambling self-help groups, Drug Dependency/Detox, Gambling Helpline, community centre counselor, other service providers.

In general, Nova Scotians are more likely to access formalized services to assist with problem VL gambling (5%) than to go to friends or family members (3%);

- there is quite often an overlap in sources accessed. In fact, 66% of those who have sought help through informal avenues (friends/family) have also pursued the issue with formalized service providers;
- 84% of those seeking assistance eventually go to sources outside their friends and families;
- compared to all other adults in Nova Scotia, Regular VL Gamblers are more likely to seek help from informal sources and tend to access friends and family members twice as often for help than outside organizations (7% versus 4%);
- approximately one-third (34%) of Problem VL Gamblers report having had contact with sources of assistance in the past, with only half of these

people (who are most negatively impacted by VL gambling) having pursued the issue of their problem play with more formalized sources of help;

- approximately 45% of all those identified as Problem VL Gamblers have at least one other Problem VL Gambler in their household. Thus, any treatment approach for Problem VL Players should be undertaken at the household level, as the presence of another Problem Gambler has consequences for successful treatment outcomes.

Local Drug Dependency Services offices and self-help groups such as Gamblers Anonymous and church groups are equally likely to be contacted (either directly or indirectly) by those experiencing problems with VL gambling. In Nova Scotia, 2% of all adults (~13,600 people) have accessed each of these three sources of assistance for advice and help, either for others or themselves. However, there is considerable overlap in the use of these three services among Regular VL Players, in contrast to other adults who are much more likely to use only one of the three. A similar proportion of all adults have accessed the Problem Gambling Helpline. Again, the majority of those accessing sources of help in Nova Scotia will largely be comprised of friends and family members of Problem Gamblers.

The results suggest that, to be effective, intervention programs and strategies will have to be designed to specifically target VL gamblers, as it is highly unlikely that the majority of those experiencing difficulties will be initiating contact with formalized service providers. In some cases, Problem VL Gamblers may be unaware of available services, or be presently unprepared/unwilling to participate in the anticipated treatment programs (e.g., abstinence approaches to gambling). Communication and education efforts, at a grass roots, community based level, may be effective in reaching those most in need of assistance and should play an important role in harm reduction and harm minimization efforts.

#### Reasons For Playing:

##### Infrequent VL Players:

"I play on a whim just for the fun of it once in a while because they are there and I have a few extra minutes waiting for someone to show up or to play pool."

"They are fun, I enjoy them. I see no harm if played in moderation."

"I'd say it's a form of entertainment for me--it's like shooting a game of pool when there is no one there to play with, it's like interactive TV."

"I enjoy them on occasion, it's a video game I can maybe win a few bucks from."

"It's a social thing, someone I know is playing so I'll play and chat too."

##### Frequent VL Players:

"I enjoy the suspense--if I'm going to lose my money or double it. It amuses me to see what's coming--it fascinates me--I want to see what's going to come next or how many 7's I can get--I just like to watch, I love it."

"It's a thrill, a challenge and an evening out. It's a rush."

"I play to win--I know it computerized and has nothing to do with skill, but I play because I just might get lucky and, at the same time, I get some time away from worries and stress; it relaxes me."

"I go out once every week to socialize with my sister--saves me from getting cabin fever. I don't have to think while I'm playing just some R & R I can count on away from my kids. Maybe I'll win, maybe I won't, but no matter, I've had some fun."

##### Problem VL Players:

"It's an escape--pure and simple --you are one with the machine, away from everything and everyone else. I don't have to think while I'm playing."

"I get the urge to play them. I constantly think of playing them. I play so I can forget about everything else, so I can forget about my urge. I'm fascinated by them--the colours and sounds draw me to them."

"I can't stop playing. When I'm in a place where they are, I play even though I don't want to. Once you get on the machine, you could never stop thinking, this machine is not going to beat me."

"Can't stay away. I don't want to play them, but I do anyway and spend all my money every week on them."

"Even though I try not to play, I can't seem to help it. The thrill of it--the interesting feeling it gives you even when you lose--it's so hard to explain."

# DEPARTMENT OF HEALTH STRATEGY & RECOMMENDATIONS

There will be additional efforts focused on the prevention, intervention and treatment of problem gambling.

- No. 1. *The Department of Health, in cooperation with the Regional Health Boards' Addiction Services, will increase the number of staff (5) dealing with problem gambling.*

The information on the profile of Problem VL Gamblers is important to the development of appropriate strategies for early identification and intervention. Collaborative efforts with various partners will assist in providing intervention at the point of play and maximize early referral opportunities.

- No. 2. *As a resource for managers and servers in licensed establishments, the Department of Health, in cooperation with the Tourism Industry Association, will develop a Problem Gamblers intervention program.*

Of those surveyed, 83% seeking help for problem gambling were family members, friends or others concerned about a Problem Gambler. Seventeen percent (17%) of the adults seeking assistance for problem gambling reported that they were seeking help for their own problem.

- No. 3. *Resources available to assist, educate and provide guidance for family members, friends and others concerned about a Problem Gambler will be further expanded.*

The present study provides additional insights into targeted groups of gamblers, including those experiencing harmful effects from their VL gambling. A key concern is the development of effective methods to reach those experiencing the most harm.

- No. 4. *The Department of Health will develop new methods of reaching and assisting individuals who are experiencing significant harm as a result of their VLT gambling activity.*

Addictions Treatment staff throughout the province provide hope and help to Problem Gamblers and their families. The findings of the study should be combined with the experience of service delivery to provide further direction for therapeutic interventions.

- No. 5. *Addictions staff will review the VLT study, identify key treatment issues and develop additional therapeutic responses at regionally-based symposiums sponsored by the Department of Health.*

"Lapsed" VL Players, identified through the present study, can provide crucial information to better understand the characteristics of players who previously played at regular levels. It will be important in the development of intervention strategies to determine the strategies and controls that this group of ex-Regular Players are using to change their gambling behaviour.

- No. 6. *The Department of Health will undertake a further study of former regular VLT users to investigate effective interventions for current Regular Players who wish to change their gambling behaviour.*



**1997/98 NOVA SCOTIA VL PLAYERS' SURVEY** was a collaborative initiative involving the Nova Scotia Department of Health, Focal Research Consultants Ltd. and other professional and academic individuals. The survey was commissioned and funded through the Nova Scotia Department of Health Drug Dependency/Problem Gambling Services. Survey design, implementation of the survey, analysis and preparation of the Technical Report was performed by Focal Research Consultants Ltd., Halifax, Nova Scotia.

**Additional Copies:**

More detailed information is available in the 1997/98 Nova Scotia VL Players' Survey - Technical Report:

- Section 1.0
  - Introduction
  - Background
  - Methodology
- Section 2.0 - Provincial Overview Of VL Play In Nova Scotia
- Section 3.0 - Problem VL Gamblers Analysis

**To obtain a copy of the Technical Report, contact:**

Government Bookstore  
One Government Place  
1700 Granville Street, Ground Floor  
P. O. Box 637  
Halifax, Nova Scotia  
B3J 2T3

Telephone: (902) 424-7580

Fax: (902) 424-5599

E-mail: lucianwm@gov.ns.ca  
Wendy M. Luciano

For additional copies of the Highlights Report, contact:

Brian Wilbur, Director  
Drug Dependency Services  
Strategic Health Service Branch  
DEPARTMENT OF HEALTH, NOVA SCOTIA  
P. O. Box 488  
Halifax, Nova Scotia  
B3J 2R8

Telephone: (902) 424-7220

Fax: (902) 424-0550

E-mail: wilburb@gov.ns.ca

**Principal Investigators:**

Dr. Tony Schellinck, Focal Research Consultants Ltd.

Tracy Schrans, Focal Research Consultants Ltd.

**Contact:**

Tracy Schrans, Vice President  
Focal Research Consultants Ltd.  
7071 Bayers Road  
Suite 326, Starlite Gallery  
Halifax, Nova Scotia  
B3J 2C2

Telephone: (902) 454-8856

Fax: (902) 455-0109

E-mail: frcl@ns.sympatico.ca



# Appendix G

**Perceptions of Problematic Machine  
Characteristics and On-Line Tracking  
among Regular Video Lottery Players**

**#99-051**

**Sterling Research Incorporated  
January 1999**

Both groups said that video lottery might be less prone to problems if we introduced the following changes. Players could set limits when starting their play, and have the machines 'remind them' with a one to two minute pause when they had reached their limit. Additionally, they felt the machines should randomly produce the size of bonuses, and the bonus should be hidden. They were also *very interested* in being able to track their time and expenditures while play was ongoing. Most felt a small clock in the corner would be useful, but they were split on real time versus machine time. Finally, they thought that the areas where VLTs are played should be a little more brighter so that players could not "hide" away.

Any changes the participants dismissed included questionnaires, films, or other instruments to suggest they had the potential for a problem. The participants viewed these as impractical, because they claimed problem players know they have a problem and would not pay attention to them.

On-line tracking was initially met with much suspicion. Many of the participants were aware that ALC tracks time and expenditures on-line, and they could not fathom any reason for providing player information. A few people at first thought it would be used to track large winners and reduce their odds of winning, or for marketing purposes. Once we explained the reason for on-line tracking of players was for social planning and health policy purposes, the participants became much less defensive. However, they still required clear reasoning as to *how* this would help them or others who played video lottery. It is clear that the players were supportive of the idea provided they could not be identified in any way, a government agency is receiving the information, and it would be used to at least direct resources to where they are most needed.

The participants themselves came up with an idea of a card with a PIN number that would be used to track players. However, they did not like the idea of a card *unless it was mandatory* to play the machines. Their

reasoning was that most people would not use them, and if it was not mandatory the statistics would be inaccurate, which would defeat the purpose of the tracking. The idea of a "cash card" that would also have an identification number was not well liked by most of the participants because they feared they would lose the card with money on it. A few did like this idea because they would use it to set their spending limits. Lastly, the idea of a PIN number that would be punched in on a key pad was also well received. In fact, only one participant from either group did not like this idea. This person was afraid their fingerprints would be lifted off the machine to reveal who they were.

We asked the participants what demographic information they would be comfortable in providing for tracking purposes, and they were uncomfortable providing any. Still, when it was explained the usefulness of the information, they were more willing to provide their gender and age, **but definitely not their income**. In the end, all of the participants stated that if they **had to provide the information to obtain a number or card to play**, they would do so. One openly admitted he would lie.

We also explored possible options of warnings for players. In short, players who scored high on the SOGS did not want any obtrusive warnings such as a red screen when they were exceeding extreme parameters. A small traffic light in the corner of the screen with a green, yellow, and red light was slightly better received, but they were concerned that someone could look over their shoulder. We found the same issue for a running tally of cash in and cash out. The players did not want others to know that they were overextending themselves. However, when asked if they would use a button or separate machine to check their status, most stated they would not. The problem then, is providing an unobtrusive warning that the player can see, but others are not likely to see. Nevertheless, the participants stated that if a machine could track their time and play and let them know on a regular basis, that it would help some, but not all players. This is because many players either do not care or are in extreme denial.

The participants did not think incentives for using the system were required if it was mandatory to play. They did like the idea of incentives for staying within normative play parameters, but they thought it would have to be a minimum of 300 to 500 credits.

Possible names that emerged from the groups for an on-line tracking system were "Player Alert" and "Game Guardian." Both were liked equally well across the groups.

### **Recommendations**

Alterations to the machines should be considered that allow the player to set a limit and be prompted once they have reached the limit to see if they wish to cash out. The limits should be reasonable in size. Otherwise, excessive players will set excessive limits so that the machine does not prompt them. Further research may have to be conducted about the effects of randomizing the bonus in size and hiding the value from the player. However, it makes sense that it would lead to less chasing if this aspect of the game were changed. Any device that allows the player to keep track of their time may also be helpful. This might comprise forcing licensed establishments to have a clock in the play area of VLTs. The ability for players to track their own time and expenditures, and particularly to relate it to other VLT players also appears to be warranted. We do not believe it is going to eliminate excessive play among all players, but it will provide players with a mechanism that they can use to cope with possible excessive behaviour.

If on-line tracking is put in place, we recommend it be a mandatory feature of play. The findings have suggested that if players are convinced they cannot be identified and that the information is not going to be used to **lower their odds** or for marketing, they would support it.

The level of information required should be carefully assessed so that unnecessary demographic information is not solicited from players. Additionally, the tracking system would have to be carefully introduced so that each player is completely informed about it.

We also feel that a PIN number that is punched into the machine is a superior method to a card. Cards can be lost, whereas once a person memorizes their PIN number it is difficult to lose. Additionally, cards could possibly lead to domestic violence if a member of a household finds the card and confronts the player, or cuts the card up.

It is clear from the findings that many problem players *know* they have a problem, and they do not want others to know. Having an obtrusive on-screen warning that will show others that they are in an excessive range may lead the players to seek out establishments or machines that do not have these features (ie. illegal machines or machines on Native Reserves). It might be possible to have a very small colour coded warning with text in the centre of the screen that lasts for five to ten seconds when the player first signs on. This may also be accompanied by a prompt of, "Do you wish to continue?" If it is small enough for just the player to see, it may give some players the "wake-up" call they need. However, the time, positioning, and other features should be carefully tested.

Finally, it does not appear to matter to the players what the system of on-line tracking is called. Still, we recommend a name like "Player Alert" or "Game Guardian" to coincide with the message of intent of the purpose of the tracking.

### Introduction

*The Nova Scotia Alcohol and Gaming Authority contracted Sterling Research Incorporated to conduct two focus groups with 'frequent' video lottery players on January 14, 1999. The purpose of the groups was to explore two broad topics. First, what – if any – characteristics of video*

lottery play might lead to the development of problematic play behaviour. Second, how would the players react to on-line tracking of their play? This would be done to self-evaluate their time and expenditures regularly, and so that government agencies could assess the dynamics of video lottery play for social and health policy decisions.

The groups were well attended with a broad mix of nine men and women in the first group and ten men and women in the second. Educational and other demographic features were consistent with regular Video Lottery players, as detailed in *The Nova Scotia Video Lottery Players Study*. We note that the participants must have spent or wagered an average of fifty dollars, or more, per week. Infrequent players may have differing opinions about the topics covered.

**We cannot generalize the findings from these focus groups to the larger population of video lottery players.** This does not mean the findings are inaccurate, but we do not have mathematical properties of probability to decide a level of precision. Focus groups do provide trends, but the findings should be considered with prudence nonetheless.

## **Findings**

### **Perceptions of Machine and Game Characteristics that May Lead to Problem Play**

We began each group by discussing frequency and reasons for playing video lottery games. All the participants played a minimum of twice per week, and most claimed they played to relax or used the games as a form of stress reduction. A few also reported their main reason for playing to win money, 'beat the machine,' or for excitement.

When we asked the participants what characteristics of the machines or games lead to people developing problems with their video lottery play, they were emphatic about several points.



The first was the fact that the bonuses are not "hidden." A bonus tells a player that they have the possibility of winning a specific sum of money. According to the participants, this led to many players – including them – chasing after the bonus, and often spending more money than the actual bonus was worth. Several participants remarked:

"When you see a bonus, it's like 'Ping!'"  
(SOGS =16). "And also, when you've put so much money in and you see this bonus, you're going to get more money, because eventually you think that if I get this bonus, at least I'm going to get some of my money back. I eventually have to hit it."  
(SOGS=14)

All of the participants felt this led to overspending, because many people would think if they could win the bonus, they might lose less money. Additionally, the participants claimed that to play for the bonus they would have to bet at the maximum level. So, to obtain the bonus, they would also be wagering larger stakes to obtain it. Finally, several participants felt that the bonus rarely pays off what they put in, but only one person reported **not playing** for it (SOGS=0).

Participants who scored high on the SOGS (10 or above) were more likely to claim that they tried to beat the machine. For these people, small things enticed them to keep playing. For instance, one participant reported that, "just missing a 'Royal [Flush]' by one, and so you go and get twenty more dollars because you think that twenty is going to come back." (SOGS=9). Another participant claimed that, "A lot of people are off by one and they keep thinking it's going to hit, it's going to hit." (SOGS=10) "Or it pays out a little bit here and there, which leads them to think they're going to win." (SOGS=3).

A second finding from both groups is that when a machine hits a "jackpot," it emits sounds and lights that other players can see and hear. They called this "the bells." The participants noted two difficulties with "the bells." To begin with, they observed that many players who are "cashing out" (stopping their play), or getting ready to cash out, will continue to play after someone else has won a large jackpot. Additionally, one person who claimed to be "addicted," and scored 16 on the SOGS, stated he began playing video lottery after a friend of his "got the bells." This person described the sensation of the lights and sounds as if he were in a state of reverie. Several other participants found the sounds of the bells emitted by the machine slightly mesmerizing.

Most participants reported difficulties in keeping track of their time and expenditures **while playing** video lottery. They claimed this was partly the result of not having any clocks in the establishments they frequent. Whatever the reason for losing track of time and money, this posed a problem for many:

"It's a bad thing. You spend too much money." (SOGS=20) "There's things you have to do and they don't get done because you get lost in the time. You go to lunch at twelve and go to the bar and you're supposed to be back at one, and you stroll in at two." (SOGS = 9)

One participant felt they *knew* what they were spending, but kept on going while "caught up in the play." (SOGS=7) Most stated they *knew* if they were overextending themselves per session, but did not have any sense of the amount until they had finished playing. They then could tell precisely how much money they had spent. We did not discuss the notion of "out of pocket" expenses. Nevertheless, the participants felt they could relate how much they had won or lost per session. ***They could not tell how much they had spent in an average month.*** This has implications for survey research in gaming. As noted in recent

studies, survey questions that ask people for their *average monthly expenditure* on a gaming activity are probably beyond a respondent's ability to recall accurately.

The participants did not relate the speed of the machines to perceived problem play. The participants stated that – within reason – it did not matter how fast or slow the play was. However, the 'stop button' can speed up certain games ('Swinging Bells'), which may lead to increased expenditures. One participant explained that if you "jammed the machine" (held down the stop button continuously) the machine would go through a complete set of spins before arriving at credits won or lost. By pressing the stop button intermittently, the machine does not have a chance to go through the complete set of spins. This allows a player to learn more quickly whether they had won or lost credits. However, it also leads to more possible bets being placed in a shorter period. Many participants felt that the machine predetermined the outcome, and the stop button allowed them to find out more quickly whether they had won or lost after each bet. Therefore, several used the stop button as a mechanism to speed up their determination of whether they had won or lost credits, which inadvertently led them to wager more in a shorter time.

However, the notion of control over the machine also came up. While many participants claimed that they had little control over the machine, they contradicted themselves in several places suggesting some illusion of control. We saw this with the 'stop button,' but more players felt they had some control over video card games than "swinging bells." We suspect it is not so much the makeup of the game that leads to problem play. Gambling fallacies may be a stronger cause of problematic play. Some people may be more susceptible than others because of education, motives for play, and so forth.

Lastly, several participants were very concerned about bill validators being placed on the machines. All of the participants across the groups agreed that bill validators would lead to heavier losses for them, since

they would not have to go to a change machine or the bar etcetera to get coins for the machines. Even this break was seen as a chance for a "breather" that might lead them to realize they were overextending themselves financially. This would not be the case with bill validators.

### **Altering Machine Characteristics**

In the second phase of the focus groups, we told the participants that as part of a scenario, the Government of Ontario had hired them to develop video lottery machines. The design would have to reduce the potential problems associated with play and still be enjoyable for people who do not have problems. We told the participants they could redesign the machine in any way they liked. It was up to them.

The first suggestions across the groups concerned setting limits with the machine at the beginning of play. The machine would then prompt the player once they had reached their limit about whether they wished to continue or cash out. A one minute pause would accompany this to allow the player time to think about what they were doing. There was some debate whether the machine should automatically cash people out after they had reached their limit or prompt them. The majority felt the "hard core" player would keep playing regardless. Also, there is apparently a great deal of superstition about the effect of cashing out and the effects it has on a player's odds. However, all of the participants felt a pause would force all video lottery players to look around and take a "breather."

The participants would also "hide the bonus" and make it random. They did not want to lose the possibility of winning a bonus, but they felt that if people did not know what the bonus was worth, they may be less willing to risk large sums of money on it. This would work particularly well if the machine randomized the size of the bonus. It would not take long for experienced players to know how much each bonus was worth even if it were hidden. However, the participants thought if the bonus paid out different amounts randomly, no one would know how much it would be

worth and therefore might be less likely to chase it. Additionally, a few participants (who scored 3 or less on the SOGS) felt it would add excitement to the game.

Many participants across the groups thought that having a small clock in the corner of the machine would help them track time they spent on the machine. Still, there was some debate whether this would help the severe problem players. Additionally, they were split about the clock displaying the time of day or time spent on the machine. We noted all of the participants were **very concerned** as to other people knowing how much time or money they spent on the machines.

Closely related to the clock in the corner, was a running tally of the time **and** money placed in the machine per session. Several participants stated this would not help people who were extremely excessive with their play, but they did believe it would be beneficial to many who overextend themselves in the "heat of the moment." The dilemma with this option was that, again, the players did not want this on the screen (out of embarrassment) and yet they did not think many people would use a button to check to see where they stood at any given point in time. As one person put it, "If you're a problem gambler or you like to play a lot, you don't want anybody to know about it." In spite of this, all of the participants stated they would like to know what they had expended in time and money.

The first group thought that brightening up the areas where the machines are found, and not having the machines "hidden away" would also be helpful. One participant who scored 0 on the SOGS stated that she plays video lottery in two particular locations because she can see when people are coming in, and she can stop playing to go socialize.

Finally, the second group introduced, *unprompted*, the idea of a player's identification card that would track their time and expenditures over a

period. This card would enable the player to obtain their status at a video lottery machine, or at a "stand alone" machine in a private location.

After the groups had made their recommendations, we probed each for various possible changes. Using questionnaires, film clips, or other devices on the machines to illustrate their potential for a problem, and what a problem might mean were dismissed outright. The players stated that this would lead to people going to the bar to get a drink, which they do not do now, and drinking would exacerbate the problem. They would not mind if the machine paused for one minute after a large win and prompted them to cash out. However, paying out large prizes the next day was not considered an option. Lastly, the players liked the notion of being able to track themselves against other players in the province to see where they stood as for normative behaviour. Until we discussed on-line tracking, they could not figure out a way to do this without being identified personally, and personal identification was completely out of the question.

### **Tracking Information**

In the third phase of the focus groups, we asked the participants how they would feel if video lottery machines gathered information regularly about time played and expenditures. Several people claimed the *Atlantic Lottery Corporation* (ALC) already does this. When we explained that we wanted to track players using an identification number **that would not identify them in any way**, the participants became suspicious about why this should be done. Most thought ALC manipulates the odds of winning, and one person thought ALC would identify those who were winning to reduce their odds. A few people also expressed a concern that companies would use the information to create games which players could not resist. Still, one person thought the idea was good, because planners could provide the information to groups like Gamblers Anonymous.

Once we explained that the tracking would be used for social and health policy decisions and *not* for marketing purposes, the participants became less suspicious, but still could not understand how or why the information could be useful. We told the groups that one possible use could be directing problem gambling resources where problem players need them most. Once the participants clearly understood that: a) no one could identify them, b) a government agency would gather the information, and c) it would be used, at the very least, to provide direction and resources about problem gambling, they appeared supportive of the idea.

We then asked the participants how we could track individual players' habits without identifying them. In both groups, the idea of a *player card* with an identification number surfaced *unprompted* almost immediately. A few participants in each group had some concerns about the efficiency of the card as for keeping accurate statistics. They contended that keeping the statistics accurate would be difficult. First, every player would have to use the card, and there would be a problem of people continuously losing their cards and getting new ones. We also uncovered other issues, such as where would they obtain a card, and who would show them how to use it. The participants dealt with these quickly within each group. They suggested that we make the cards available at the counter of each licensed establishment, and each person would keep their card. It was admitted that some people might lose their card, but one or two people in each group stated this would not affect the statistics.

We then provided a series of scenarios and asked the participants in each group to rate them individually as poor, fair, or good. A "poor" would show that they did not like the idea, and would not participate. A "fair" would show that they did like some aspects of the idea, but they did not like some aspects. Finally, a "good" would affirm that they liked the idea and would not hesitate to participate.

Scenario One: "You have a card that has a PIN number on it. It will not identify you. The machine would identify only your pin number. If you use the card, it will track your time and expenditures and provide warnings when you **might** have exceeded your limits. This might be on a daily or even weekly basis. **You do not have to use the card, but if you do it will give you information about your own level of play.** The card will also track your number as for time and expenditures as we discussed above."

	Group One	Group Two
Poor Ratings	4	0
Fair Ratings	3	9
Good Ratings	2	1

The participants who assigned this a poor or fair rating did so *because the card was not mandatory*. They felt that no one would use the card and it would throw off the statistics. Two poor ratings also came from participants who additionally felt the players would absorb the cost of cards and equipment through a reduction in their odds of winning. Both people scored above 10 on the SOGS. Those who provided a rating of good thought it was a good idea and would help them and others.

When we introduced the same scenario to the participants with the card as mandatory, that is, the VLT would not operate without it, the ratings were as follows.

	Group One	Group Two
Poor Ratings	0	0
Fair Ratings	0	0
Good Ratings	9	10

The participants thought it was a very good idea if the card were mandatory. "It tracks the amount of money and time into the machine for each player." (SOGS = 8). "As long as it doesn't identify you, I think it's a good idea if it helps solve some of these social ills." (SOGS=0). Still, a few participants **did not** want the card dispensed at the counter. They wanted some place where they could pick up a card without being seen.



Scenario Two: "Same card, only this time you use it instead of cash. You would take it to a money machine or to the bar and put money on the card. Instead of cashing out from the machine, you cash out on your card. You can save winnings for a later date or use the card to redeem your winnings."

	<b>Group One</b>	<b>Group Two</b>
Poor Ratings	7	2
Fair Ratings	0	4
Good Ratings	2	4

As shown, the ratings differed substantially by group. The major objection with a "cash card" in the first group was that they would not be able to "put the money in." All but one of these participants scored 8 or higher on the SOGS (One person scored 2). The reasoning behind this appeared to be a desire to feel the money as they were putting it into the machine. Additionally, these participants felt that they would disregard the money on the card as "real," in a similar way that some of them disregarded their "credits on the screen" as real money. The concern among the four poors and four fairs in the second group was simply that they would inevitably lose their card with money on it. Participants in both groups who rated this as "good" felt it would be a convenient way to limit their expenditures. They would place a limit on their card and stop when their card ran out. All these participants scored 0 to 3 on the SOGS, suggesting that they might not have a problem with controlling their expenditures. Additionally, others in the groups, who scored higher on the SOGS, stated that putting money back on the card was just as easy as putting it into the machine.

Scenario Three: "No card, you have a PIN number that you **have** to punch in to play a machine. The PIN number does not identify you in any way. It is simply a mechanism to help you track your play against others to let you know when you **might** be exceeding your limits. Again, we will also track your number to provide information about your time and expenditures at a VLT."

	Group One	Group Two
Poor Ratings	1	0
Fair Ratings	0	0
Good Ratings	9	10

Here, the one participant who rated the idea as poor was concerned about their fingerprints being left on the keypad (SOGS=5). Although the participants liked this idea equally well as an identification card, they became preoccupied with how an individual would obtain a number, and the possibility of duplicate numbers throwing off the statistics. Apart from this issue, they did not clearly prefer the card to a PIN number that they would punch in at the machine.

#### **Demographic Information:**

**All** of the participants stated they would stop playing video lottery if any mechanism could associate their play with their identity, specifically their name. **Most** stated that they did not want to divulge any demographic information, *but this was before we informed them as to the purpose of the tracking*. After full discussion of the tracking and the possible uses, several participants were still reluctant to provide demographic information, and one stated they would just lie about it. **Nevertheless, they all stated if it were mandatory to play, they would provide their gender, and age**. The one extremely sensitive demographic was income. Not one person stated they would accurately provide their level of income.

**Warnings:**

Most of the players seemed genuinely interested in being able to track their own time and expenditures, the latter monthly. Several who scored above 10 on the SOGS stated it would probably give them a "wake-up call" after they saw what they had spent in a month. They claimed to know their sessional expenditures, but not what it would add up to after a month or two. We asked both groups what kind of warning they thought might help people who were having difficulties controlling their VLT play. The suggestions all evolved around the machine informing them about time and expenditures, and the discussion was limited.

To facilitate the discussion, we asked the participants what they would think of a system that would place them against other VLT players in the province. If they were within "normal" parameters of time and money (dictated by the jurisdiction) they would have either a green screen, or a small traffic light in the corner of the screen with a green light. Once they crossed over the line from "normal" to "at risk" the screen or traffic light would turn yellow, and it would become red if they went beyond excessive limits.

The participants did not like at all, the idea of the entire screen showing yellow or red. This would say to others in the area that they were beginning to lose control or were out of control, and they did not think it was anyone's business. Many in the group were receptive to a small light in the corner of the screen, but others stated that people are constantly looking over their shoulders and again, they did not want to have a red light shown to anyone else but themselves. It is clear from the discussion that the higher the SOGS score, the more reluctant the participant was to have any indication on the screen that they were possibly problematic players. As one person who scored 16 stated in the group, "I know I have a problem. I don't want the whole bar to know. Then you're trying to shame a person into stopping and that's depressing." The other observation we have made is that the participants appeared to consider VLT play as deviant behaviour (in the sociological sense in that it violates societal norms). The compromise

solution to the warning lights was to have a button on the VLT that could be used to display their status of play. However, many participants openly admitted they would not use it.

Another possible "warning" that we explored was a running tally of cash in and cash out, again in the corner of the screen. Again, we found vocal opposition from the people who scored highest on the SOGS (9 or higher). Other participants also did not like this idea, because they claimed that people would see that they had lost a lot of money in a machine. These other people would wait for the machine, so they could win what had been lost.

As for warnings, the enigma is how to provide one that players will see or use, yet will not "shame a person" into depression and possible behaviour that might be dangerous to themselves or others. Most participants felt if a VLT, or stand alone machines they could access in private, gave them monthly information about their time and expenditures, and showed them where they fell within the remainder of the VLT players as for problematic behaviour, that it would help some people. It would not help everyone, but they claimed some players will deny their problem despite all proof.

We also probed for incentives that would ensure usage of a card or pin number system of tracking, and all of the participants did not think they required it. They claimed they would not require incentives if it were mandatory, although they agreed that knowing that the tracking was not being done for any other purposes than health and social policy would be extremely important in obtaining player favour for the system.

Possible names for an on-line tracking system included "Player Alert" and "Game Guardian," and the players liked both. Finally, the participants felt that stand alone machines that would tell them their risk of gambling problems would be a good idea. Most claimed to know that

they had a problem with their VLT play, but they thought it would be particularly helpful for new players. They also felt that the machine could be in many diverse places, from bars to shopping malls.

**98-051**

**Video Lottery Discussion Outline January 14, 1999**

**Introduction:**

- ☛ Introduction of researcher and company. The researcher/Company is not connected to the client in any way. Explain the focus group technique, audio-taping, and the two-way mirror. Tell the participants how and why they were selected, and that there are no right or wrong answers. We want their honest thoughts on the topic(s). Disagreeing with someone in the group is okay, but remember to respect others' opinions also. Ask them to try to speak clearly and one at a time so as not to garble the audiotape.

**Warm-Up:**

- ☛ Individual introductions of participants: first names only.
- ☛ How long have they been playing? What do they like most about playing Video Lottery?
- ☛ Do they play in one location or do they go to several locations to play?

**Part A.**

**1. Perceptions of Problems with Video Lottery?**

Based on what you have seen while playing video lottery, what kinds of things lead to someone developing a problem with it?

Probe for characteristics of machine and/or people that lead to problem behaviour.

Stop Button

Inability to track time

Inability to track expenditures

Lights, sounds, colours

Speed of the machine

Type of game played (eg. cards versus line games like swinging bells)

## 2. Changing Machine Characteristics

A company has hired us as a team to redesign video lottery machines. We have to create a machine that will help people with problems control their gambling, but won't bother people who play frequently and do not have problems.

Probe: Removing Stop Button

Clock in corner keeping track of how long they have been on the machine.

Running tally of amount of money wagered/lost instead of credits

A brief overview of the game and the odds of winning (ie. 50/50 odds each time)

A quick questionnaire on-screen designed to tell them whether they are at risk of having a problem.

A short film showing problems with video lottery play

A mechanism in the machine tracks their time and expenditures, and the screen is green if they are within "normal" boundaries (ie. 60 - 70% of players), it turns yellow if they exceed "normal" play (ie. 80 - 90%), and it turns red if they dramatically exceed "normal" play (90%+). *They would still be able to play, only the screen would change colour indicating they **may** have exceeded their limits.*

Pauses or breaks in machine play, where the machine shuts down for a few minutes.

The machine automatically cashes the player out after a large win.

Large winnings would be paid out on day after the win.

Come to a consensus with the group as to what they feel would help problem players control their gambling but not be bothersome to them.

Describe "new" machine. What effect – if any – would this have on your own video lottery play?

Probe for *their* anticipation of using the new machine to possibly control their own gambling. Probe for reduction/increase in levels of *their* play.

## Part B.

### 3. Player Tracking

How would you feel if the machines gathered information on an ongoing basis about the amount of time and money played at each machine?

Probe for awareness of ALC tracking systems.

How would you feel if the information gathered was used to help each player monitor their own play in terms of time and expenditures vis a vis other people playing?

We are back to redesigning the machines, and we have been told that we have to include a mechanism that will track each player's time and expenditures **without identifying who the player is**. How are we going to do that?

Probe for card, pin number, other ways.

Okay, I would like you to consider a number of different scenarios.

- A) You have a card that has a PIN number on it. It will not identify you, only your pin number would be identified by the machine. If you use the card, it will track your time and expenditures and provide warnings when you **might** have exceeded your limits. This might be on a daily or even weekly basis. **You do not have to use the card, but if you do it will give you information about your own level of play.**

I want you to rate this as poor, fair, or good, where a poor would be that you don't like the idea and you absolutely would never use the card, a fair is that you might use the card and you might not use the card, and the good is that you really like the idea and you would use the card.

#### Discuss

- B) Same card, only this time you use it instead of cash. You would take it to a money machine or to the bar and put money on the card. Instead of cashing out from the machine, you cash out on your card. You can save winnings for a later date or use the card to redeem your winnings.

#### Rate with Poor, Fair, Good

- C) No card, you have a PIN number that you **have** to punch in to start machine. The PIN number does not identify you in any way. It is simply a mechanism to help you track your play against others to let you know when you **might** be exceeding your limits.

#### Rate with Poor, Fair, Good

What if the Card or PIN number had some demographic information about you that **would not identify you personally**, but it would allow for tracking of player characteristics? For instance, it might tell us that men are more likely to play for longer periods of time than women. Or it might tell us that people from higher income groups are more likely to bet higher amounts than people from lower income groups.

Probe for feelings toward tracking and types of demographic information they would be willing to give. Probe for voluntary use of card or PIN number.

Let's assume for a few moments that there is a card, or PIN number that can be allotted to each player voluntarily or involuntarily. The two reasons for it are to track player characteristics and to warn players when they **might** have



exceeded their limits. **It would not be used to identify any player regardless of their level of play. That is their business.**

What do you see as important in terms of warnings for players?  
Probe for Time and Expenditure.

How do you think the machine should provide the warning for the players?

What if people were reluctant to use the card or PIN number.  
What kinds of things could we offer them to use the card?

Probe for different types of incentives

What would we call a system that helps players to identify and track their own video lottery play? Any suggestions?

What do you think about a single machine, not a video lottery machine that would allow you to test yourself for possible gambling problems? Where should it be?

Wrap-up:           **Administer SOGS in confidential manner**

Questions from Observers

Questions from Participants

(If allowed) Identify Client

Thank Participants



# Appendix H



**STANDING COMMITTEE  
ON  
COMMUNITY SERVICES**

**SOCIOECONOMIC IMPACT OF  
VIDEO LOTTERY TERMINALS**

**MAY 1999**



House of Assembly  
Nova Scotia

Honourable Ronald S. Russell, CD  
Speaker  
House of Assembly  
Province House  
Halifax, Nova Scotia

Dear Mr. Speaker:

On behalf of the Standing Committee on Community Services, I am pleased to submit the 1999 Report on the subject of Socioeconomic Impact of Video Lottery Terminals in accordance with Bill 17, "Video Lottery Terminals Moratorium Act", as legislated by the House of Assembly on June 29, 1998 for the First Session of the Fifty - Seventh General Assembly.

Respectfully submitted,

Maureen MacDonald, MLA  
(Halifax Needham)  
Chairperson  
Standing Committee on Community Services

Halifax, Nova Scotia  
May 1999



Printed on paper that  
contains recycled fibre

**Socioeconomic Impact of  
Video Lottery Terminals**  
*Final Report*

*April 1999*

**Socioeconomic Impact of Video Lottery  
Terminals**

98-5953-04-01

*Submitted by*  
***Porter Dillon Limited***  
in association with  
Sterling Research Incorporated

## PROCEDURES AND OPERATIONS

The Standing Committee on Community Services has held public committee meetings on the VLT Study on the following dates:

### Committee Meetings

September 28, 1998

October 8, 1998

January 21, 1999

April 1, 1999

April 15, 1999

April 29, 1999

## NOTICES

Notices of the committee meetings and public hearings were sent to all Members of the Committee, Support Staff of the Caucus and Legislative Offices, the House of Assembly Press gallery, the Government Wire Services and was published on the Internet.

## TRANSCRIPTS

Transcripts of the committee meetings/hearings are available from the Legislative Committees Office, Third Floor, Dennis Building, 1740 Granville Street, PO Box 2630 Station M, Halifax, NS, B3J 3N5: Telephone: 424-4432 or 424-5241.

## ANNUAL / INTERIM REPORTS

The report of the Standing Committee on Community Services was compiled and written by Porter Dillon Limited in association with Sterling Research.

Distribution of the report will be as follows: to the Speaker/Clerk of the House of Assembly, All Members of the Legislative Assembly, All Nova Scotians, the Legislative Libraries in all provinces and territories, to all Legislative Assemblies across Canada, and the News Media. The report will also be available to all persons who request a copy through the Nova Scotia Government Bookstore at 1700 Granville St., Halifax; 1-800-526-6575 or 1-902-424-7580.

## ACKNOWLEDGEMENTS

The Standing Committee on Community Services wishes to thank Mr. John Heseltine, Mr. John Jozsa of Porter Dillon Limited and Mr. Kerry Chambers of Sterling Research Incorporated for their commitment in formulating this report.

The Standing Committee also wishes to thank the Staff of the Legislative Committees Office for organizing the committee meetings, Darlene Henry, Legislative Committee Clerk, Sherri Mitchell and Mora Stevens, Co-ordinator of the Legislative Committees Office. Acknowledgment and appreciation are also extended to Mr. George Murphy and Mr. Greg Lusk, Department of Finance, Public Tenders Office; Rodney Caley, Editor of Hansard and Hansard Staff; Don Ledger, Co-ordinator Legislative Television and Broadcast Services and Staff, and Michael Laffin, Co-ordinator of House of Assembly Operations and Staff.

April 25, 1999

**STANDING COMMITTEE ON  
COMMUNITY SERVICES**

House of Assembly Nova Scotia  
3rd Floor, Dennis Building  
1740 Granville Street  
P. O. Box 2630, Stn. M  
Halifax, Nova Scotia  
B3J 3N5

ATTENTION: Darlene Henry  
Committee Clerk

***Socioeconomic Impact of Video Lottery Terminals - Final Report***

We are pleased to present our Final Report summarizing our study of the Socioeconomic Impact of VLTs in Nova Scotia. We have attempted to respond to questions and comments received at our meeting of April 15, 1999. We have also received comments and information from the Nova Scotia Alcohol and Gaming Authority and the Nova Scotia Gaming Corporation, which we have incorporated as appropriate. We are very appreciative of this input and the permission of the Committee to allow their review of our draft.

We look forward to presenting this report to the Committee on April 29. As we have stated since our original presentation to the Committee, we have provided information in this report as objectively as possible. We have no position for or against VLTs in Nova Scotia but trust that we have provided the information required by the Standing Committee and the Nova Scotia Legislature on which to base its decisions concerning Video Lottery Terminals.

Yours truly,

**PORTER DILLON LIMITED**

John Heseltine, MCIP  
Project Manager

JMH:jep  
attachment  
Our File: 98-5953-04





## Socioeconomic Impact of Video Lottery Terminals Executive Summary

### 1.0 Introduction

- VLTs have been legal in Nova Scotia since the beginning of the 1990s. They have had considerable impact already. Play on VLTs has continued to increase strongly along with concerns for the consequences from VLT opponents. This report has been prepared pursuant to Section 4(1) of Bill 17 entitled the *Video Lottery Terminals Moratorium Act*, which has currently fixed the number of licensed VLTs in Nova Scotia.
- *The objective of this assignment as stated in the Terms of Reference to which Porter Dillon and Sterling Research responded was "to assess the social and economic implications of VLT gaming on Nova Scotians to assist the all party committee (i.e., the Standing Committee on Community Services) in determining if, after considering the positive and negative impacts, VLT gaming in particular exceeds the limits of social acceptability in Nova Scotia."*

### 2.0 VLT Operation

- VLTs are simple computer games. Results are a product of random chance. Players cannot stay ahead on VLTs in the long run. Approaches to play applied by most VLT players tend to exacerbate losses.
- The 1997/98 Nova Scotia Video Lottery Players Survey recently completed by Focal Research Consultants of Halifax provides excellent, detailed information on the characteristics and habits of Nova Scotia players. We used it extensively as a primary source and to corroborate findings from our Focus Groups and our secondary research.
- According to this survey, the demographic profile of VLT players is similar to the general population. Players tend to be a bit younger and more likely to be male, with slightly better than average incomes and somewhat lower than average education. Typical players are not sedentary. They, in fact, tend to be active people with a large number of interests and above average expenditures on all forms of gambling as well as on entertainment in general.
- Problem players tend to have even less education, and are more likely to be separated, divorced, or widowed than other regular players. Focal estimates that problem players, on average, spend \$808.88 per month on VLTs, compared to \$228.50 for frequent players and \$53.49 for infrequent players. They represent approximately 16 per cent of regular VLT players and 1 per cent of the adult population of Nova Scotia. Because of their relatively high expenditure, problem players contribute 53 per cent of the total VLT gaming revenue in Nova Scotia.

### 3.0 The Pros and Cons of VLTs

- Opponents of VLTs contend that the machines fit perfectly with the obsessive-compulsive tendencies of problem gamblers. A 1998 Nova Scotia survey by Sterling Research found 67 per cent of respondents disapproved of VLT gambling. Although VLTs were perceived to have more employment benefits than bingos or lotteries, they were rated below casinos. They also received a low rating from respondents relative to other forms of gambling for entertainment and the highest rating for addictiveness.
- Two key reasons why the Province legalized VLTs in 1991 were the legalization of gambling in a growing number of jurisdictions and the proliferation of illegal machines in Nova Scotia. The RCMP feels that legalization has all but eliminated illegal machines. Proponents of VLTs also argue that VLTs create jobs and support some businesses, while generating significant government revenue. Finally, many people enjoy playing VLTs and proponents of the machines argue the majority of players should be not be denied the opportunity to gamble because a minority has problems controlling themselves.
- Potential responses to VLT issues include further reducing the number of machines in Nova Scotia, modifying machines to alter playing characteristics, taking measures to limit play by specific users, and educating the public concerning the operation of VLTs and problems associated with excessive play. NSGC has undertaken several measures already such as placement of "banners" on VLT displays to provide information on problem gaming initiatives and institution of the "Responsible Gambling Initiative." A key thrust of the Responsible Gambling Initiative is the current VLT Request for Proposals to replace up to 3,300 VLTs in the province. The RFP includes standards intended to bring consideration of problem gambling into VLT design. VLT design is also being assessed through the "VLT Harm Reduction Study" at Dalhousie University. Other ongoing initiatives include training of VLT retailers, review of VLT sites by problem gambling experts, and various programs to educate and inform young people and the potentially affected public.
- It remains a question whether the many initiatives of NSGC, NSAGA, and other government agencies are adequate. The large number of programs represents a recognition of the seriousness of problem gambling and each appears to be a positive gesture to reduce its occurrence and/or mitigate its impacts. Problem gambling persists, however, and further programs were suggested by stakeholders, particularly more extensive education and more funding for treatment of problem gamblers.

### 4.0 Focus Group Research

- We conducted six Focus Groups: three in the Halifax region to assess urban residents with easy access to a casino and three in New Glasgow taking in more rural residents who are more distant from alternative gaming possibilities. In each case we held a session with non-VLT players, with regular non-problem players, and with problem players. The primary purpose of our Focus Group investigations was to determine what social problems related to VLT use

might be reduced or augmented in the event of a VLT reduction or ban. We also hoped to determine the likely behaviour of VLT players in the event the machines become less readily available.

- *We have recognized the limitations of the Focus Group method in reporting and applying this research. In particular, we are aware that Focus Group information does not provide the type of quantitative measure typically yielded by a sample survey that will allow the analyst to extrapolate findings to the larger population based on mathematical probability theory. For this study we are fortunate to have the published results of the Focal Research survey. Their data have been valuable to us in inferring our Focus Group results to the wider population.*
- If VLTs are banned, our Focus Group research suggests casual VLT players will be largely unaffected; regular VLT players will shift to other forms of entertainment, including other forms of legal gambling; and problem VLT players will shift to other forms of gambling, including gambling on First Nations Reserves and illegal VLT gambling.
- Focus Group participants were fairly evenly split on the appropriateness of a VLT ban. Many felt VLTs place an undue burden on the social system. Roughly half of the problem players see a ban as the only way of keeping themselves from playing, notwithstanding that many later contended they would continue to play on illegal machines or at sites on First Nations Reserves. On the other hand, many participants, including problem players, felt that VLT play is a matter of personal choice and the majority who enjoy controlled play should not be restricted because a small proportion who cannot control themselves.
- The primary benefit of a ban, in the opinion of most Focus Group participants, is that it would prevent young people who have not yet played VLT games from taking them up. Other evidence concerning other banned activities, not raised at the Focus Groups, such as taking illicit drugs suggests, however, that many individuals will seek out these activities despite their illegality. Society must address similar problems arising from these illegal activities.
- Players in the Focus Groups suggested limiting the hours during which VLTs can be played as a means of preventing problem play. They also felt that a "pause mechanism" that would tell players how much time and money they had expended and let them cash out or continue might provide a 'wake-up call.'

## 5.0 Economic Impacts of VLT Use

- The total 1998 VLT wager in Nova Scotia was \$404.7 million, up 8.1 per cent from \$374.5 million in 1997. After prizes paid to players are subtracted, \$121.1 million was divided among operating expenses (7.8 per cent), revenue to retailers (25.9 per cent), and revenue to the Province of Nova Scotia (66.4 per cent). Total Provincial revenue for VLTs in 1998 amounted to \$80.4 million or 1.6 per cent of total revenue.

- The total household income impact on \$121.1 million in net VLT expenditures diverted to other gaming and leisure activities will be in the order of \$37.3 million. Proportionately, this is about 10 per cent less than the household income impact of the same expenditure on VLTs. On this basis, household income in Nova Scotia would be about \$3.9 million less, if VLTs were eliminated, which translates into approximately 150 full-time equivalent jobs lost.
- VLT gambling is an efficient method of government revenue generation dependent on self-selected individuals who, for the most part, are as able as others to afford to play. Because VLT players are not disproportionately drawn from lower income groups, VLT play is not a particularly regressive method of government revenue generation.
- Revenue will not be lost on a one to one basis if VLTs are banned. Money now spent on VLT play will be diverted to other economic activities that are taxed resulting in an estimated loss of \$57.1 million of the current \$80.4 million in revenue. Other gaming and leisure activities return less to the government because of higher operating expenditures and lower direct government revenue from consumer and operating expenditures.
- The costs of approximately 6,400 problem VLT players in Nova Scotia are estimated at about \$74.2 million, or \$6.2 million less than the gross government revenue gain from VLT operation. This is based on an estimated cost per problem gambler of \$11,600 derived from studies in other jurisdictions. Costs are related to employment cost, lost labour, health treatment cost, money taken from family necessities, bad debts, criminal justice, rehabilitation support services, welfare cost, and other factors. Data do not allow us to state definitively the quantity of these various costs in Nova Scotia. Banning of VLTs is unlikely to completely eliminate these costs. Problem players strongly indicated that they will likely shift to similar compulsive behaviours, including continued VLT gambling.
- If VLTs are banned there will probably be benefits to suppliers and operators of illegal VLTs; First Nations Reserves, which may well expand the number of legal VLTs they offer to the current allowable maximum; and to remaining legal forms of gambling.
- If VLTs are banned, the primary current legal suppliers, licensed establishments, will be negatively affected and some may be put out of business. The impact on these businesses is, however, likely to be balanced by benefits in other sectors of the economy to which current legal VLT expenditures will move.

### Conclusions

*The VLT issue is complex. From the evidence we have gathered, we cannot state that problem VLT players are any more harmful to themselves and others than individuals excessively involved in various other forms of gambling. The moral and philosophical question is at what point our society prohibits activities from the population to prevent individuals from harming themselves and others around them?*

*If VLTs are banned in Nova Scotia except on First Nations Reserves, which we assume will increase their number of machines to the maximum of 806 allowed under current agreements, we estimate that the following incremental economic impacts would occur:*

- *household income to Nova Scotians would decline by about \$3.7 million and 145 full-time equivalent jobs would be lost and*
- *government revenue would decline by about \$57.0 million.*

*Our findings suggest that prohibiting video lottery would not necessarily help people who have already developed problems. These individuals may move to other forms of gambling, seek out illegal video lottery machines if they resurface, and/or go to First Nations Reserves that have VLTs. The argument that abolition of VLTs will reduce the number of future problem players, on the other hand, may have some merit, although experience with other illegal activities suggests that prohibition does not necessarily protect the uninitiated completely. Abolition of any activity, in any case, usually has its own set of costs, most of which are unforeseen.*

*Our research suggests that even without the availability of VLTs, many problem VLT players and potential problem VLT players will gravitate to remaining VLTs on First Nations reserves and other forms of gaming. Hence, the total \$74.2 million annual cost to society of problem players would not be completely eliminated by a ban. To "break even" the removal of VLTs will have to result in a \$60.7 million reduction in problem gambling costs. This equates to prevention of about 5,230 problem gambling cases or 82 per cent of current problem VLT players.*

*Nova Scotians have to decide whether they want video lottery gambling and then accept the consequences that follow. It is clear that the participants in all of the Focus Groups were unaware of the magnitude of current video gambling problems. People must be able to make informed decisions as to what is acceptable in their communities, as well as whether they wish to become involved. It appears that there is a lack of understanding about video lottery gambling, its impacts, who may be at risk for developing problems, and other associated issues. It is also clear from the Focus Groups that there are characteristics of present video lottery machines that may encourage problem gambling behaviour. If video gambling is retained in Nova Scotia, it is imperative to aim market research at harm reduction.*

*In this light, we believe there is a need for education about responsible gambling overall, particularly with respect to the warning signs of problem gambling. Few Focus Group participants displayed any knowledge of the way gambling problems develop or progress. If our society continues to sanction gambling as a leisure activity, then like alcohol consumption, we need to provide information about the risks and warning signs of problem behaviour.*



# SOCIOECONOMIC IMPACT OF VIDEO LOTTERY TERMINALS

## *Final Report*

### TABLE OF CONTENTS

<b>1.0 INTRODUCTION</b>	<b>1</b>
1.1 Background	1
1.2 Report Purpose	3
1.3 Report Organization	3
<b>2.0 VLT OPERATION AND PLAY</b>	<b>5</b>
2.1 How VLTs and Slot Machines Work	5
2.2 VLT Revenue	8
2.3 VLT Players	11
2.4 Problem Players	14
<b>3.0 THE PROS AND CONS OF VLTs</b>	<b>17</b>
3.1 Arguments Against Legalizing VLTs	17
3.2 Arguments for Legalizing VLTs	20
3.3 Current and Potential Responses	23
<b>4.0 FOCUS GROUP RESEARCH</b>	<b>27</b>
4.1 Focus Group Background	27
4.2 Non-Problem versus Problem Players	29
4.3 Impacts of VLT Play	32
4.3.1 Perceived Positive Impacts for the Individual	33
4.3.2 Perceived Positive Impacts for the Family	34
4.3.3 Perceived Positive Impacts for the Community	34
4.3.4 Perceived Negative Impacts for the Individual	35
4.3.5 Perceived Negative Impacts for the Family	42
4.3.6 Perceived Negative Impacts for the Community	44
4.4 Impacts of a VLT Ban	45
4.5 Altering VLT Characteristics and Other Options	49
4.6 Knowledge and Education	51
4.7 Conclusions	52

Socioeconomic  
Impact of VLTs  
Final Report

Page i

<b>5.0 ECONOMIC IMPACTS OF VLT USE</b>	57
<b>5.1 Economic Impacts</b>	58
5.1.1 <i>Casual VLT Players</i>	60
5.1.2 <i>Non-resident VLT Play</i>	61
5.1.3 <i>Conclusions</i>	62
<b>5.2 Fiscal Impacts of VLT Gaming</b>	65
5.2.1 <i>Regressiveness of the VLT Tax</i>	65
5.2.2 <i>Incremental Government Fiscal Impacts of VLTs</i>	66
5.2.3 <i>Total Direct Fiscal Impact</i>	67
5.2.4 <i>Incremental Direct, Indirect, and Induced Government Fiscal Impacts</i>	67
5.2.5 <i>Total Incremental Government Fiscal Impacts</i>	68
<b>5.3 Economic and Financial Costs</b>	68
5.3.1 <i>Reduced Labour Productivity</i>	68
5.3.2 <i>Personal Indebtedness and Bankruptcies</i>	70
5.3.3 <i>Rehabilitation Costs</i>	71
<b>5.4 Other Considerations</b>	74
5.4.1 <i>Illegal VLT Distributors and Operators</i>	74
5.4.2 <i>First Nations Bands</i>	75
5.4.3 <i>Other Gambling Operators</i>	77
5.4.4 <i>Licensed Establishments</i>	79

#### LIST OF TABLES:

TABLE 1-1: Nova Scotia VLT Providers, March 31, 1999	2
TABLE 2-1: Expected Return from VLT/Slot Machine Plays by House Edge	6
TABLE 2-2: Distribution of Nova Scotia VLT Wager, 1998 and 1997 (Fiscal Year)	10
TABLE 4-1: Focus Group Participation, Halifax and New Glasgow, 1999	29
TABLE 5-1: VLT Wager, Activity Comparison, Fiscal 1998 and 1997 (\$'000,000s)	57
TABLE 5-2: Provincial Gaming Wager, Activity Comparison, Fiscal 1998 (\$millions)	63
TABLE 5-3: VLT Problem Gaming Fund Disbursements	73
TABLE 5-4: VLTs on First Nations Reserves, Nova Scotia, February 28, 1999	76

#### LIST OF FIGURES:

FIGURE 2-1: Nova Scotia Gaming Wager by Gaming Activity, 1998	9
FIGURE 2-2: Provincial Government Revenue from Gambling and from VLTs and Slots, 1998 (Percent of Total Revenue)	10
FIGURE 2-3: Financial Distribution of Nova Scotia VLT Wager, 1998	11



**APPENDIX A - Slot Machine/VLT Payout Percentage**  
**APPENDIX B - Problem Gambler Screen**  
**APPENDIX C - Focus Group Discussion Outline**  
**APPENDIX D - Focus Group Participant Profiles**



## 1.0 INTRODUCTION

On June 28, 1998, the Nova Scotia Legislature passed Bill 17 entitled the *Video Lottery Terminals Moratorium Act*. The bill restricts the number of Video Lottery Terminals (VLTs) in Nova Scotia and provides for a study to assess the socioeconomic impact of the machines on Nova Scotia. This report is the study mandated by Bill 17.

### 1.1 Background

In 1985, the Federal government amended the *Criminal Code of Canada* to provide sole control of lotteries and other games of chance to the provinces. This amendment also removed the prohibition of slot machines and other mechanical gaming devices in Canada, paving the way for Video Lottery. By 1991, VLTs were legal in New Brunswick and Newfoundland, but not Nova Scotia. There were, however, many so called "gray machines" that were illegal in the province. Faced with a choice to either continue efforts to police the machines or make them legal, the Province of Nova Scotia opted for the latter in May 1991. This move was consistent with a North American trend that has gained momentum through the 1990s.<sup>1</sup>

The decision to legalize VLTs was controversial. There was immediate, organized opposition. By January 1993, public pressure was mounting over VLTs. Many people did not want them in corner stores, laundromats, and other neighbourhood businesses in which they were considered too accessible. Two arguments arose: one to have them banned outright and one to limit them to licensed establishments. The latter argument was based on the policing issue (i.e., that banning them would drive them underground and the Province could not control them). The Government, therefore, ruled that they would be restricted to liquor licensed establishments. The Province also contributed \$500,000 for the prevention and treatment of gambling addiction. Arrangements, discussed below, were also made to build this fund annually from the proceeds of VLT play.

As of March 31, 1999, there were 3,228 VLT retailers licensed by the province. There were also 397 VLTs another on First Nations Reserves allowed through agreements between the Province and the individual bands that have identical provisions for each band. The ten bands that now have agreements are eligible to run up to 806 terminals (i.e., 409 additional). Bill 17 fixed the number of VLTs in the first three categories (legions, community organizations, and bars and lounges) but does not affect agreements

<sup>1</sup> See: George G. Fenich, "A Chronology of (Legal) Gaming in the U. S." in *Gaming Research & Review Journal*, Volume 3, Issue 2, 1996, pp. 65-76. The timeline provided in this article shows a flurry of events following the court decision in *California vs. Cabazon Band of Mission Indians*, which led to the United States *Indian Gaming Regulatory Act*. The chronology shows that by 1993 most American states had some form of legalized gambling. All Canadian provinces did so, also, over the same period.

with First Nations Bands. The breakdown among categories of providers is provided in Table 1-1.

**TABLE 1-1: Nova Scotia VLT Providers, March 31, 1999**

Category	Number of Retailers	Number of VLTs	% of Total
Royal Canadian Legions	112	609	16.80%
Community organizations	36	146	4.03%
Commercial bars and lounges	427	2,473	68.22%
Sub-total	575	3,228	89.05%
First Nations Reserves		397	10.95%
<b>TOTAL</b>		<b>3,625</b>	<b>100.00%</b>

Source: Nova Scotia Gaming Commission

Notwithstanding restrictions, controversy concerning gambling in Nova Scotia, particularly VLT gambling, has continued. There is ongoing concern that VLTs are more accessible than casino gambling and that the design of VLT machines is particularly conducive to compulsive gambling. A prevalence study of problem gambling in Nova Scotia conducted by Baseline Market Research found that 1 to 4 per cent of the adult population of Nova Scotia had serious problems controlling their gambling.<sup>2</sup> Moreover, a 1997-1998 survey of video lottery players in Nova Scotia by Focal Research Consultants regarded 12.5 to 19.5 per cent of regular video lottery players as "problem" players.<sup>3</sup> Again, accounting for margin of error, this suggests that between 1 and 4 per cent of the adult population of Nova Scotia are experiencing difficulties with video lottery gambling. This represents between 7,000 and 28,000 people.<sup>4</sup> If one assumes the actions of these individuals directly impact on an average of at least two others, the number influenced by problem VLT play, including problem players themselves, could be as high as 85,000.

<sup>2</sup> Baseline Market Research, *Final Report, Prevalence Study on Problem Gambling in Nova Scotia*, 1996.

<sup>3</sup> See: Focal Research Consultants, *1997/98 Nova Scotia Video Lottery Player's Survey*, October 1998, p. 3-3. On this page and generally Focal describes "problem" players as representing 16 per cent of "regular players." This is based on a sample of 711 in their survey, which provides a confidence interval of  $\pm 3.5$  per cent.

<sup>4</sup> Based on a 1998 Nova Scotia adult population (20 years and over) of 693,653 estimated by Statistics Canada. See: Statistics Canada, *Annual Demographic Statistics, 1998*, Catalogue no. 91-213, p. 107.

## 1.2 Report Purpose

Porter Dillon and Sterling Research were selected to undertake this study of the Socioeconomic Impact of Video Lottery Terminals on the basis of our competitive proposal dated September 11, 1999. We were subsequently interviewed by the Standing Committee on Community Services and confirmed to begin work in early 1999. A schedule for project execution was submitted on January 27, 1999, and refined in consultation with Darlene Henry, the Committee Clerk. This schedule has been closely adhered to throughout the study process.

*The study was undertaken to satisfy the specific requirement of Section 4(1) of Bill 17 that "the Standing Committee of the House of Assembly shall tender for and engage an independent person or body to carry out a study on the socio-economic impact of video lottery terminals on the Province." The objective of this assignment, as stated in the Terms of Reference to which we responded and reiterated in our proposal, was "to assess the social and economic implications of VLT gaming on Nova Scotians to assist the all party committee (i.e., the Standing Committee on Community Services) in determining if, after considering the positive and negative impacts, VLT gaming in particular exceeds the limits of social acceptability in Nova Scotia."*

## 1.3 Report Organization

In the next two chapters of this document, we outline issues relevant to VLT gambling in Nova Scotia. In Chapter 2 this includes a brief explanation of the operation of VLT machines and, their close relations, casino slot machines. We also provide information comparing the extent of VLT gambling in Nova Scotia and the revenue derived from it. A final section of Chapter 2 summarizes the key findings of the recent Nova Scotia Video Lottery Players Survey by Focal Research Consultants of Halifax, which provides excellent profiles of typical VLT players and problem players. Chapter 3 then summarizes the commonly perceived "Pros and Cons" of VLT gambling.

Chapter 4 reports on six Focus Groups concerning VLT play. Chapter 5 provides detailed analysis of the economic and fiscal impacts of VLTs on Nova Scotia. These two chapters cover the core research for this assignment. Through the Focus Groups we have developed an understanding of the habits of typical VLT players, their alternatives to VLT play, and the consequences of their play on their families and Nova Scotia society. Our economic analysis has determined the extent of VLT play and its consequences for the economy and Provincial Treasury. In particular, we have assessed the likely impacts of changes that would reduce or eliminate VLTs.

*In this Final Report we have refined previously presented conclusions. We have not provided "recommendations" as such. The decision whether or not to restrict or ban VLTs depends on judgement of the evidence we have accumulated. Readers will find both clear benefits and unquestionable costs outlined below. We have also speculated on*

*the likely change in these benefits and costs in the event that VLTs are further restricted in Nova Scotia. This includes calculation of economic and fiscal costs and benefits. The weighting of these positives and negatives, however, is a matter of judgement based on an understanding of the values of Nova Scotians, which we feel are best interpreted by elected legislators.*

## 2.0 VLT OPERATION AND PLAY

VLTs are similar to casino slot machines. The main difference is that casino machines retain a mechanical element in the form of spinning wheels that indicate the combination resulting from each play and payout coins in a hopper after each win. This is probably a tip of the hat to the clanging sound that traditionally permeates North American casinos. On a VLT machine output is illustrated on a TV-like video screen. Wins are recorded quietly on the screen as credits. When a player chooses to cash out, the machine prints a statement that is redeemable within the bar or tavern in which the machine is located. Other than sound effects and the option to access a poker-type game on VLTs, they are identical to slot machines.

### 2.1 How VLTs and Slot Machines Work

Both slot machines and VLTs have computer-like inner workings. Although VLTs are sometimes presented as sophisticated works of computer programming, they are far simpler than most of the common video games primarily designed for children. VLTs in Nova Scotia offer 33 games, which are all variants of either slot machine, poker, or keno games.<sup>5</sup> None of the games observed by members of the study team are particularly complex and the required graphic output is elementary.

VLT games, slot machines, and home video games are all driven by random numbers generators (RNGs), which are an inherent component of computer chips that run contemporary slot machines, VLTs, and computers. RNGs are usually programmed to be activated by a clock in the machine. The current time (usually measured in fractions of seconds) is used by the programmer to "seed" the RNG and initiate a sequence of numbers. The sequence of numbers that is generated at the moment that the player presses the "Play Activate" button or its equivalent on a VLT or slot machine is translated into the symbols that are then displayed. Spinning wheels or other visual feedback are irrelevant after the point of activation, as is pressing the "Stop Play" button.<sup>6</sup> The RNG instantaneously decides the sequence of numbers and translates them into the familiar fruit, bar, bell, and "7" symbols or, in the case of Poker games, into playing card faces. The machine then calculates and delivers/records the payout, if any, associated with the particular combination.

It is important to recognize that the VLT player on the slot-type game has no control whatsoever over the outcome. It is impossible to know the sequence associated with a

---

<sup>5</sup> Information provided by Nova Scotia Gaming Commission (NSGC), April 20, 1999. According to data supplied by NSGC, revenues breakdown as 75 per cent for slot machine type games, 24 per cent for various types of poker, and 1 per cent for keno.

<sup>6</sup> The "Stop Play" button is not found on all VLT machines. Some machines do not have this option.

particular time or to even know what time the machine is recording. The "Stop Play" button has no influence either. It simply allows players to decrease the time between placing their bet and being informed of the outcome. It lets them speed up play, but it does not give them any control over the machine. As writer Frank Scoblete says:

The player putting in a coin is merely activating the display portion of the program. When you put your coins in, you are finding out what the will of the god-in-the-machine is, but your placing the coin had nothing to do with which number came up. Had you placed the coin a split moment earlier or later, the god in the machine would have had a different set of random numbers generated, and thus a different set of symbols would have been displayed. In short, the slot player, unlike the table player, has no free will in the matter of what will happen when he plays. He merely places his sacrifice at the god in the machine's altar and hopes for the best.<sup>7</sup>

With poker games there is some influence from user decisions to bet or hold but payouts are calculated in relation to mathematically superior strategies so that players experience very similar effective outcomes as with the slot game (see Appendix A - Slot Machine/VLT Payout Percentage).

Payouts reflect the odds of winning on each turn. They are calculated in favour of the "House" or machine owner. Machines may payout differently but they are all calculated to guarantee a return to the proprietor at the expense of bettors. The result is that money played in slots or VLTs inexorably disappears. Table 2-1, modified from an Internet printout that is actually fairly optimistic about the potential to win on slot machines summarizes the pace at which 100 Loonies will be reduced given a specific return to the House and consistent pay back at the "exact win percentage on every play."

**TABLE 2-1: Expected Return from VLT/Slot Machine Plays by House Edge**

Payout/House Edge			
Plays	99% / 1%	93% / 7%	88% / 12%
0	\$100.00	\$100.00	\$100.00
1	\$99.00	\$93.00	\$88.00
2	\$98.01	\$86.49	\$77.44
3	\$97.03	\$80.44	\$68.15
5	\$95.10	\$69.57	\$52.77
10	\$90.44	\$48.40	\$27.83
15	\$86.00	\$33.67	\$14.69
20	\$81.79	\$23.42	\$7.75
25	\$77.78	\$16.30	\$4.09

<sup>7</sup> Frank Scoblete, "The God in the Machine," reprint from *Casino Magazine*, March 1995, p. 2.



Although the text accompanying this table suggests that finding a higher payout machine will give a player considerably more time to hit a jackpot, the non-gambler will probably be struck by the rapidity with which money can be dissipated. An experienced VLT player can easily run 25 plays in a few minutes.

In the past, the potential for mechanical imperfections and a variety of cheating techniques created some possibility for players to gain an edge but these are now gone. VLTs are electronic. Malfunctions cause them to cease operation, not to operate differently. As Scoble says:

The new machines, even if they have reels, are computer-generated programs run by a single microchip that determines lights, camera, action, payout percentages, and what will be paid. They cannot be beaten by finesse, but a sledge hammer can get them to give up some coins before you're carted off by the security guards.<sup>8</sup>

In short, VLTs and slot machines cannot be beat. In the long-run, all players will lose. Nova Scotia statistics presented below, indicate that VLT players in the province lost 30 per cent of their bets last year. This is despite the fact that Provincial regulations require that VLTs be set with a minimum 80 per cent payout (i.e., 20 per cent "House edge"), as provided by Section 6 (2)(g) of the Nova Scotia *Gaming Regulations* (see accompanying box). Furthermore, Nova Scotia Alcohol and

#### *Requirements for Nova Scotia VLTs*

An approved [VLT] device shall include the following characteristics:

- (a) it shall divide all money it accepts into credits denominated in the \$0.25, \$0.10 or \$0.05 values;
- (b) it shall accept wagers of one credit;
- (c) it shall accept coinage but not paper currency unless approved by the Commission;
- (d) it shall not expose a player to the chance of losing at any one play, credits of a total value exceeding \$2.50;
- (e) it shall permit a player at any time to withdraw for payment or reimbursement any accumulated or unused credits;
- (f) it shall not award a prize exceeding \$1000 for one wager;
- (g) it shall not pay prizes in cash;
- (h) it shall be programmed to award as prizes not less than 80 per cent of the money it accepts; and
- (i) it shall issue a voucher or ticket to indicate the value of a prize or credit.

#### **Source:**

Schedule "A", *Regulations Made by the Governor in Council Pursuant to Chapter 4 of the Acts of 1994-95, the Gaming Control Act*, Section 6(2).

<sup>8</sup> *Ibid.*, p. 2.

Gaming Authority (NSAGA) statistics show Nova Scotia VLTs actually payout at a rate of 95.04 per cent or the equivalent of less than a 5 per cent edge to the House.<sup>9</sup> The tendency of many players to gamble a fixed sum of money until it is gone and the pattern of problem gamblers to chase wins until they have depleted all of their available monies cause players to cash out much less than if they played a fixed number of turns randomly.<sup>10</sup>

Nonetheless, the machines are popular. Statistics indicate that VLT play has increased in Nova Scotia over the past five years. It is still rising. In North American casinos, slot machines have exploded and are consuming increasing proportions of casino floor space. This is at the expense of various table games at which players actually have a chance to come out ahead. The apparent reason is that VLTs and slots are simple, and as Frank Scoblete simply puts it "[they] are fun."<sup>11</sup>

## 2.2 VLT Revenue

As of March 31, 1997, Nova Scotia had 2,879 VLT machines in operation or 3.95 per 1,000 adults (i.e., over 18 years). In terms of numbers of VLTs per capita, Nova Scotia ranks sixth among the eight Canadian provinces that have legalized the machines.<sup>12</sup> Numbers are currently fixed as a result of Bill 17.

Nova Scotia revenue from gambling is close to the average for Canadian provinces. According to the brief report "The State of Gambling in Canada" prepared by Canada West Foundation,<sup>13</sup> Nova Scotia collects 3.3 per cent of gambling revenue taken in by Canadian provincial governments, although the province has only 3.2 per cent of the national population. According to Canada West, this is 1.9 per cent above the Canadian average. The leaders in generating gambling revenue are the three Prairie Provinces.

<sup>9</sup> See NSAGA, *Annual Gaming Report 1997-1998*, Volume I, p. 24, Item 2.7. Item 2.8 on p. 25, in addition, indicates that the payout rate in Nova Scotia is better than in either Saskatchewan or Manitoba, which in 1997 respectively paid at rates of 91.7 and 92.7 per cent.

<sup>10</sup> This contrast between regulated and recorded "pay out" and player "cash out" does not reflect any violation of regulations by operators or any inaccuracy in NSAGA statistics.

<sup>11</sup> Frank Scoblete, *op cit.*, p. 1. A casino owner informally consulted in the course of our research added that slots are encouraged by casino management because they require much less labour input than table games and generate more revenue per square foot than is possible with a table game.

<sup>12</sup> NSAGA, *Annual Gaming Report 1997-1998*, Volume I, p. 26. Numbers do not include VLTs on First Nations Reserves in Nova Scotia.

<sup>13</sup> Canada West Foundation, "The State of Gambling in Canada: An Interprovincial Roadmap of Gambling and Its Impact," October 1998.

VLTs are the most important component of the Nova Scotia gambling picture. They accounted for \$404,746,203 wagered in 1998 or 43 per cent of the nearly one billion dollars (\$940,284,575) in total Nova Scotia wagering that year. This represented an 8.1 per cent increase in VLT betting from 1997, which was exceeded by growth in casino revenue (27.9 per cent) and the take from charitable lotteries and raffles (11.3 per cent). Overall, total Nova Scotia wagering increased by 11.4 per cent.<sup>14</sup>

Among the eight provinces that allow VLTs, data provided by Canada West show Nova Scotia's reliance on VLTs and slot machines ranks fourth, tied with Manitoba after Alberta, Saskatchewan, and New Brunswick. As Figure 2-3 based on calculations using provincial data printed by Canada West shows, however, Nova Scotia derives the third highest proportion of its revenue from VLTs and slot machines. The 1.6 per cent of Provincial revenue taken through the machines is only exceeded by the 2.7 per cent of revenue collected by the Province of Alberta and 2.0 per cent taken in Manitoba.

**FIGURE 2-1: Nova Scotia Gaming Wager by Gaming Activity, 1998**



Source: NSAGA, *Annual Gaming Report 1997-1998*, Volume 1, p. 17, item 2.2.

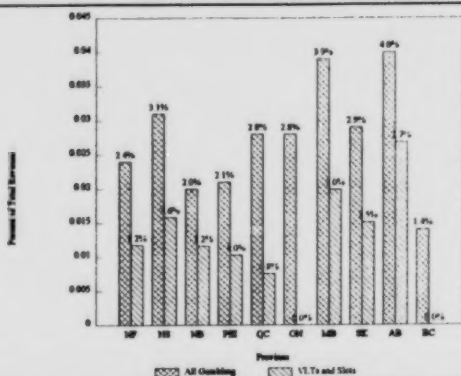
In dollar terms, the NSAGA indicates the Province of Nova Scotia collected about \$80 million from VLT machines in 1997-98. This is up from \$29 million estimated by Canada West for 1992-93.<sup>15</sup> Retailers who provide the machines to the public collected \$31 million in 1998. Table 2-3 provides more precise and complete information from the NSAGA on the distribution of VLT monies. As Figure 2-3 based on the table shows, players cashed

<sup>14</sup> NSAGA, *Annual Gaming Report 1997-1998*, Volume 1, pp. 16-17.

<sup>15</sup> Canada West, *op cit.*, p. 3.

out 70 per cent of the monies they wagered on VLTs. Of the remaining 30 per cent, 20 per cent is paid to the Province, 8 per cent to retailers, and 2 per cent goes to operating expenses.

**FIGURE 2-2: Provincial Government Revenue from Gambling and from VLTs and Slots, 1998 (Percent of Total Revenue)**



Source: Canada West Foundation, "The State of Gambling in Canada: An Interprovincial Roadmap of Gambling and Its Impact," October 1998.

**TABLE 2-2: Distribution of Nova Scotia VLT Wager, 1998 and 1997 (Fiscal Year)**

	1998	1997	Change
Operating Expenses	9,308,798	7,451,000	24.9%
Revenue to Retailers	31,335,691	29,713,812	5.5%
Revenue to Province	80,351,012	68,980,061	16.5%
Prizes Paid	283,750,702	268,402,592	5.7%
TOTALS	\$404,746,203	\$374,547,465	8.1%

Source: NSAGA, *Annual Gaming Report 1997-1998*, Volume I, p. 23.

A portion of commercial and government revenues goes to gambling research and treatment of gambling-related problems. Contributions are made to the Nova Scotia Gaming Foundation, which was established on March 11, 1998. VLT retailers contribute 1 per cent of their VLT commission to the Foundation. The Nova Scotia Gaming Corporation (NSGC) matches this contribution from its revenues. According to the NSAGA *Annual Report*, "As of March 31, 1998, this fund had an accumulated balance of \$2,031,536, up from \$1,271,407 in 1996/97" (an increase of \$706,129 or 55.5 per cent).<sup>16</sup> NSGC reports it has increased to \$2,560,851 since that time, or by another 26.1 per cent.<sup>17</sup>

**FIGURE 2-3: Financial Distribution of Nova Scotia VLT Wager, 1998**



Source: NSAGA, *Annual Gaming Report 1997-1998*, Volume 1, p. 23, Item 2.5.

## 2.3 VLT Players

Since the beginning of our research for this assignment the Nova Scotia Department of Health (NSDOH) released an important study by Focal Research Consultants, a Halifax-based marketing and social research firm. NSDOH commissioned Focal to do the study in June 1997. The core of their research, which is summarized in the report, was two independent surveys conducted by telephone with randomly selected adults from October 12, 1997, to January 19, 1998. The first survey was specifically of video lottery players, while the second was addressed to the general population.

<sup>16</sup> NSAGA, *Annual Gaming Report 1997-1998*, Volume 1, p. 21.

<sup>17</sup> Letter from Dana Gordon, Q.C., Vice Chair, Nova Scotia Gaming Corporation, to John Heseltine, M.C.P., Porter Dillon Limited, April 14, 1999.

Subjects for the VLT Player survey were screened from a random sample of 11,691 Nova Scotia households. A household screening survey identified the total number of adults (19 years or more) in the household and whether or not each adult played VLTs. Of 11,691 households sampled, a total of 9,339 households (79.9 per cent) and 18,650 adults were successfully screened. Within this sample Focal identified 927 regular VLT players of whom 711 (76.7 per cent) completed the Video Lottery Players Survey.<sup>18</sup> The overall response rate for the survey was 61.3 per cent. The estimates derived from this survey are generally accurate at  $\pm 0.33$  per cent 19 times in 20 (i.e., 95 per cent).<sup>19</sup>

The General Population Survey was conducted with 400 randomly sampled adults in Nova Scotia. It obtained a response rate of 61.1 per cent.<sup>20</sup> Estimates from this survey are accurate at  $\pm 5.0$  per cent 19 times in 20 (95 per cent).<sup>21</sup>

The following box summarizes key findings of the Focal study. Among the primary findings are that 23 per cent of adult Nova Scotians played video lottery at least once in the year preceding the Focal survey and 5.7 per cent of the total adult population are classified as regular players.<sup>22</sup>

Demographically, video lottery players tend to be younger than the rest of the adult population. They are most often male, between 19 and 24 years of age, less educated than the general population, more likely to be single, and more likely to live in households consisting of other adults but no children. The Focal researchers characterize VLT players as "busy people." They socialize more than other Nova Scotians, get out more, play more sports, pursue more hobbies, and have friends over more often. They also tend to prefer to attend sporting events over cultural events or sites, suggesting they are seeking more exciting, stimulating experiences. This high activity level is related to the predominance of younger males among VLT players but also tends to counter the stereotype that VLT play is a solitary or sullen activity.

The generally high activity level of VLT players carries over into their other gambling activities. In addition to their involvement with VLTs, regular players indulge in a much wider variety of other gambling options than other Nova Scotians:

---

<sup>18</sup> Focal Research Consultants, *op cit.*, p. II.

<sup>19</sup> *Pers comm.*, Tracy Schrans, Vice President, Focal Research Consultants, March 1999.

<sup>20</sup> Focal Research Consultants, *op cit.*, p. II.

<sup>21</sup> *Pers comm.*, T. Schrans.

<sup>22</sup> Focal Research Consultants, *op cit.*, p. IV.

## Focal Research Video Lottery Players Study (Key Findings)

23% of adult Nova Scotians are "casual" VLT players, and 5.7% are regular VLT players (i.e., play 4 times or more per month) ( $\pm 0.3\%$ ). Of the regular players, 16% are in the "problem" category. This means that approximately .92% ( $\pm 0.3\%$ ) of adult Nova Scotians were deemed to have 'problems' with their video lottery play.

### Characteristics of Problem VLT Players Compared with other VLT Players

- ◆ More likely male than general adult population
- ◆ Slightly more likely to be divorced/widowed/separated
- ◆ More likely to live in two person household and less likely to have children in the household
- ◆ More likely to be blue collar with an education of high school or less
- ◆ No significant differences by employment or income
- ◆ More active, social lifestyle
- ◆ More likely to indulge in other gambling and to smoke than non-VLT players

Behaviour (see Focal Research Video Lottery Players Survey, Table 3.9.2, pp. D-40-D-41)

- ◆ 6% of the VLT players agreed that their play has put a "strain" on their relationship at home
- ◆ 8% of VLT players agreed that they had lied at some point about their play
- ◆ 8% disagreed that they can give up playing any time they want to, and 6% had tried to stop at least once. 6% stated that they are trying to reduce their play on-going.
- ◆ 3% of VLT players stated they had missed time from school or work due to play
- ◆ 7% of VLT players had missed an important family or personal event as a result of playing, but the majority claimed to have done so infrequently
- ◆ 9% of VLT players had increased their debt load to play and 7% were problematic players
- ◆ Problem players spent an average of \$105 on other entertainment options compared with \$141 among frequent players, and \$102 among casual players.

VLT players used the following sources of money to play in the past year (Table 3.9.2, p. D-42):

Postponed paying bills	33% of problem players vs.	2% of regular non-problem players
Savings	23% of problem players vs.	1% of regular non-problem players
Household monies	22% of problem players vs.	2% of regular non-problem players
Credit cards	21% of problem players vs.	1% of regular non-problem players
Friends, acquaintances	17% of problem players vs.	2% of regular non-problem players
Family Members	15% of problem players vs.	1% of regular non-problem players
Banks Overdraft/Line of Credit	14% of problem players vs.	<1% of regular non-problem players
Sold Personal Property	11% of problem players vs.	1% of regular non-problem players
Used Mortgage/Rent	9% of problem players vs.	<1% of regular non-problem players
Sometimes had difficulty paying it back	34% of problem players vs.	2% of regular non-problem players

Placed in context, 66% of problem players or 98% of regular players *had not* used any of the above sources of funds to play VLTs in the past year.

Socioeconomic  
Impact of VLTs  
Final Report

Regular VLT Players tend to play a greater variety of gambling options regularly, with an average of 3.1 games played on a regular monthly basis and 4.1 different gambling activities played the last month. This means that, on average, Regular VLT Players report regular monthly playing patterns for approximately one-quarter of the 13 gambling activities currently offered in Nova Scotia and, in general, each month, will be involved in almost one-third (32%) of these same gambling options. In fact, the number of gambling activities played increases in relation to involvement with VLT gambling. Non-VLT Players participate in the fewest gambling options on average, both regularly (0.8) and in the month prior to data collection (1.6), while Casual VLT Players play significantly more games of chance for money (1.0 regularly, 2.2 in the last month).<sup>23</sup>

Finally, VLT players are much more likely to smoke than other Nova Scotians. Over half (57 per cent) of regular VLT Players smoke regularly, according to Focal, compared to 34 per cent of casual VLT players and 23 per cent of non-VLT players.<sup>24</sup>

## 2.4 Problem Players

Of regular video lottery players, 16 per cent are characterized by Focal as problem players. This is equivalent to 0.92 per cent of Nova Scotia adults. They point out, furthermore, that 1.4 per cent of adults who have stopped playing on a regular basis after experiencing time and/or money problems with VLT play/ Another 0.5 per cent have also experienced problems but continued to play after regaining control. They continue:

If those adults who had a problem but gained control of their play and have continued to be Regular Players, and those who stopped playing as a result of a self-declared problem with VL play are also included, estimates of problem play, past and present, would reach approximately 2.8%, or approximately 19,100 adults in Nova Scotia. It is not surprising, therefore, that an additional 2.4% of all adults who do not currently play VL games would state either they themselves or someone they live with has had a problem with video lottery gambling.<sup>25</sup>

The profile of problem players differs marginally from regular VLT players. They tend not to be so young, they have even less education, and are more likely to be separated,

---

<sup>23</sup> Focal Research Consultants, *op cit.*, p. VII.

<sup>24</sup> Focal Research Consultants, *op cit.*, p. X. According to Focal, 29 per cent of adults in Nova Scotia currently report they smoke cigarettes on a regular basis, with an additional 6 per cent characterized as social smokers who only "light up" on a part-time basis in social situations when they are drinking.

<sup>25</sup> Focal Research Consultants, *op cit.*, p. XIV (emphasis in original).



divorced, or widowed. Differences between problem and non-problem players are much more significant in terms of *how* they play. Focal notes the following characteristic differences between problem and non-problem players:

- problem VLT players play about as often as frequent non-problem VLT players (about 8 times a week) but play for much longer periods (a median of five hours versus 2)
- problem players, on average, bring more money to play with at each VLT session
- problem players bet at higher levels, frequently placing maximum bets
- problem players tend to "chase their losses"
- over half of problem players (52 per cent) have trouble quitting while they are ahead
- problem players respond more dramatically to their play on machines, kick, groaning, and talking to them
- problem players tend to lose track of time while they are playing
- while 73 per cent realize they are losing, the knowledge does not dissuade problem players from further play
- problem players believe they are more skilled in playing the machines.<sup>26</sup>

Focal estimates that problem players, on average, spend \$808.88 per month on VLTs, compared to \$228.50 for frequent players and \$53.49 for infrequent players. Problem players, consequently, account for a very large portion of the revenue from VLT gaming. Although they account for roughly 1 per cent of the adult population and 16 per cent of regular VLT players, problem players contribute 53 per cent of the total VLT gaming revenue in Nova Scotia.<sup>27</sup>

Problem players, according to Focal, are aware of their difficulties with VLT play and concerned about the consequences. Although only a third feel they can personally stop playing anytime they want, 76 per cent have stopped or tried to stop in the past. Problem players also tend to support stronger restrictions on VLTs with 78 per cent in favour of restricting the machines to three or four locations in Nova Scotia. Focal, also lists a number of strategies endorsed by players who have attempted to control their gambling ranging from budgeting time and money for VLTs to substitution of other activities to complete withdrawal from VLT play.<sup>28</sup>

The Focal Research study is an excellent summary of the characteristics of VLT players in Nova Scotia. It has been relied on frequently in our analysis below. It represents a unique and reliable data base on the characteristics of regular and problem players and provides

---

<sup>26</sup> Focal Research Consultants, *Nova Scotia Video Lottery Player's [sic] Study HIGHLIGHTS 1997/1998*, P. 14.

<sup>27</sup> Focal Research, *Nova Scotia Video Lottery Players Study*, pp. 3-42-3-43.

<sup>28</sup> Focal Research Consultants, *Nova Scotia Video Lottery Player's [sic] Study HIGHLIGHTS 1997/1998*, P. 13.

quantitative measures that we have used to develop economic impact estimates provided in Chapter 5.

### 3.0 THE PROS AND CONS OF VLTs

The debate over gambling and, especially, VLT machines has been powerful. As provincial governments have introduced gambling, opponents of gambling have mounted strong resistance. As discussed below, VLTs have been a particular concern because of their perceived characteristics and known patterns of play. This conflict has resulted in extensive media debate and numerous legislative initiatives, including the bill that gave rise to this study.

*The following discussion of the pros and cons of VLTs does not imply that any particular opinion is endorsed by the consulting team. Many opinions held on both sides of the gambling debate have not been properly researched. In many cases further research is needed and we have qualified some of our discussion on this basis. We have investigated many of these assertions through this study and present the results of our analysis in Chapters 4 and 5, below. We caution, however, that the requirements to produce a "definitive" study on any of these issues are substantial and cannot be met within the context of this assignment.*

#### 3.1 Arguments Against Legalizing VLTs

A cover article in the *MacLean's* magazine edition of May 11, 1998, titled "The Curse of Casinos" was supplemented by a shorter article titled "The devil's television" dealing with VLTs.<sup>29</sup> In the context of a strongly anti-gambling issue, *MacLean's* lays out the common arguments against gambling and, particularly, against VLTs. In brief, they contend that as bad as gambling is in general, VLTs are by far the worst form of gambling.

To be specific, the article indicates that VLTs incorporate a combination of access, simplicity, variety, and quick response that fits perfectly with the obsessive-compulsive tendencies of problem gamblers. They state that 1996 Nova Scotia data show "74 per cent of \$78 million in annual VLT revenue came from problem gamblers." They cite consequences of VLT addiction ranging from debt and bankruptcy through family breakdown to crime to suicide, although they provide no real statistical foundation for their assertions.

VLTs, they note, have been targeted by opponents of gambling across Canada. Opposition, in fact, convinced Ontario Premier Mike Harris not to introduce VLTs to Canada's largest market. In Alberta, strong movements are working to eliminate VLTs from specific communities through the exercise of local option. Nova Scotia, of course, withdrew VLTs from convenience stores and other non-licensed premises in which they were originally permitted because of concerns over access to minors and influence on

<sup>29</sup> John Nicol and Stephanie Noten, "The Curse of Casinos," and "The devil's television" in *MacLean's*, May 11, 1998, pp. 44-50.

residential neighbourhoods. New Brunswick is currently withdrawing VLTs from non-licensed businesses for the same reasons.

Certainly, as our foregoing discussion demonstrates, it is all but impossible, in the long run, to stay ahead, which most players appear to know.<sup>10</sup> Regular players will eventually spend more money on the machines than they cash out. Furthermore, unlike lotteries, which at least offer a remote chance of a life changing win, maximum VLT prizes are insufficient to change a player's financial circumstances permanently.

Opposition to VLTs is reflected in statistics published by NSAGA. A 1998 survey of 1,159 adults across Nova Scotia conducted by Sterling Research found 67 per cent disapproved of VLT gambling. This compares with 48 per cent disapproval of casino gambling and 17 per cent disapproval of bingos and lottery tickets. Furthermore, the same sample found 70 per cent of the adult population could find "no positive aspects" in VLT gaming and only 6 per cent were willing to say there are "no negative aspects." These numbers for VLTs contrast with just over 40 per cent who thought casinos and lotteries had no positive features and 22 per cent who saw no benefits from bingos.

Although VLTs were perceived to have more employment benefits than bingos or lotteries, they were rated below casinos. Some stakeholders we interviewed pointed out that there is very little evidence that tourists to Nova Scotia contribute much to VLT revenue.<sup>11</sup> One also noted that Nova Scotia missed the opportunity to gain from manufacturing the machines.<sup>12</sup> Most machines in Nova Scotia were produced under contract by Spielo of New Brunswick with smaller numbers produced by other out-of-province companies. All respondents to the recently issued tender to replace Nova Scotia VLTs are from outside the province.<sup>13</sup>

VLTs also received a low rating for entertainment (6 per cent) and the highest rating for addictiveness (55 per cent, just ahead of 54 per cent for casinos). Finally, although the proportions are relatively small, more respondents to the survey considered VLTs to be responsible for social problems such as overspending (15 per cent), broken homes (17 per cent), ignoring bills (8 per cent), indebtedness (7 per cent), and bankruptcy (6 per cent).

---

<sup>10</sup> An early Nova Scotia survey of 254 video gamblers found only 20 per cent willing to describe themselves as "winning more than they lose." See: Dr. Chris Murphy, et al., *Swinging Bells: Video Gamblers in Nova Scotia, A Statistical Portrait: Preliminary Findings*, Atlantic Institute of Criminology, April 14, 1994, p. 5.

<sup>11</sup> *Pers commun.*, Kerry Murphy, Compulsive and Problem Gamblers Society.

<sup>12</sup> *Pers commun.*, Russ Winterbotham, Self Help Connection.

<sup>13</sup> According to information provided by NSGC, April 20, 1999, Hi-Tech Gaming Ltd., a distributor for International Game Technology of Reno, Nevada; Powerhouse Technologies of Montana; and Spielo responded to the VLT RFP before it closed on March 9, 1999.

Eighty-eight per cent of respondents felt VLTs were likely to attract individuals who could not afford to play.<sup>34</sup>

Picking up from initiatives in Alberta to ban VLTs at the municipal level, the survey also asked, "should it be an individual's right to play video lottery machines, should your community have the right to ban video lottery machines from your community, or do you have an opinion on the subject?" The results were that 49 per cent of respondents believe that the community should have the right to ban VLTs, 39 per cent felt it is the individual's right to play, and 11 per cent had no opinion.<sup>35</sup>

Among other survey inquiries were questions related to problem gambling. In general, the survey found Nova Scotians are generally unaware of the prevalence of problem gambling, although it is well-documented. Only 5 per cent of respondents correctly indicated that it is between 1 and 5 per cent of the adult population.<sup>36</sup> The actual rate, according to the 1996 Baseline Market Research *Prevalence Study on Problem Gambling in Nova Scotia* is 3.9 per cent.<sup>37</sup> This rate is, of course, important because not only is this group the most prone to the personal problems assumed by much of the public but also because problem gamblers may require treatment at public expense. This expenditure for treatment as well as potential unemployment, lost time from work, and/or reduced productivity (resulting in lower income and other tax revenue) are possible factors mitigating the revenue gained from VLTs and other gambling. One stakeholder interviewed complained that there are insufficient programs to help compulsive gamblers and mitigate these problems.<sup>38</sup>

Many people appear to believe, also, that restriction of VLTs will protect young people who have not yet been exposed to the machines. If VLTs had a lower profile, it may, presumably, never occur to many people who have not played them that they are an option.<sup>39</sup> On the other hand, one stakeholder, pointed out that it is easier to restrict access of children and adolescents from regulated establishments like bars than from illegal

---

<sup>34</sup> See NSAGA, *Annual Gaming Report 1997-1998*, Volume I, pp. 69-75.

<sup>35</sup> *Ibid.*, pp. 75-76.

<sup>36</sup> *Ibid.*, pp. 78-79.

<sup>37</sup> *Ibid.*, p. 78. Rate pertains to the preceding year (1995). The more recent research by Focal Research, as noted above, deemed 16 per cent of VLT players to "have problems." This equates to 0.92 per cent of Nova Scotia adults. They note, however, on pp. 3-70-3-71 of their report that there are players who have dealt with problem play in the past and other current non-players who resolved problems by quitting. Focal estimates these three groups combined equal 2.8 per cent of Nova Scotia adults.

<sup>38</sup> *Pers. comm.*, K. Murphy.

<sup>39</sup> *Pers. comm.*, K. Murphy. This opinion was held by many of the individuals consulted through our Focus Groups, which are discussed in Chapter 4.

venues that by their nature are "underground."<sup>40</sup> Notwithstanding, evidence suggesting that a substantial proportion of underage young people do currently gamble on VLTs in Nova Scotia.<sup>41</sup>

A final concern is that legalization of new gambling options may distract from traditional gambling choices, especially charity-related gambling. Prior to legalization of casinos and VLTs, the only legal gambling was that permitted to raise money for charitable organizations. VLTs, however, are not similar to any device typically used for fund-raising. Furthermore, while it is far from conclusive evidence that legalized gambling does not draw money away from charitable gambling, the most recent statistics published by NSAGA show that the take from charitable lotteries and raffles rose by 11.3 per cent from 1997 to 1998.<sup>42</sup>

### 3.2 Arguments for Legalizing VLTs

A prime argument against banning VLTs is that they existed in Nova Scotia for many years before their legalization in 1991. One of our interview subjects suggested they have been in the province for roughly 20 years.<sup>43</sup> Illegal operations, not surprisingly, are unscrupulous. They frequently provide minimal payouts and, because of the secretive nature of illegal activity, expose players to additional risks.<sup>44</sup> Illegal operations also enrich the criminal element in our society, especially so called "organized crime."

As noted in Chapter 1, the original motivation for legalizing gambling in Nova Scotia was concern with illegal gambling. With respect to VLTs, expectations appear to have been fulfilled:

The RCMP ... [feels] that the legalization of VLTs, and enforcement of the applicable laws has almost completely wiped out the illegal machines which were once prolific in the province. Although they claim that a few still do exist, they are usually found when someone complains that the machines are not paying out properly; or in some cases, not paying out at all.<sup>45</sup>

---

<sup>40</sup> Pers. comm., Sgt. Ken Brown, Provincial Gaming Section, Royal Canadian Mounted Police.

<sup>41</sup> The 1996 *Nova Scotia Student Drug Use Study* found 20.4 per cent of students surveyed in Grades 7, 9, 10, 11, and 12 said they had gambled on VLTs in the year before the survey and 6.0 per cent said they did it at least monthly. Cited in NSAGA, *Annual Gaming Report 1997-1998*, Volume 1, pp. 131-133.

<sup>42</sup> NSAGA, *Annual Gaming Report 1997-1998*, Volume 1, pp. 16-17.

<sup>43</sup> Pers. comm., Clancy MacPherson, Atlantic Lottery Corporation.

<sup>44</sup> Pers. comm., Sgt. K. Brown.

<sup>45</sup> NSAGA, *Annual Gaming Report 1996-1997*, p. 130.

The other strong and related argument for legalization of VLT machines and other gambling options is that they can be taxed by the government. All of the provinces in Canada have legalized at least some forms of gambling. As Figure 2-2, above, shows, provinces collect 1 to 4 per cent of their revenue from gambling play. As noted, Nova Scotia collects roughly 3.1 per cent of its revenue from gambling, 1.6 per cent from VLTs. Gambling, as a result, has been an important tool for provincial governments to meet public needs and reduce deficits.

Ironical as it may sound, the general increase in legal gambling options reinforces the need for legalization. Nova Scotia decided to legalize gambling after New Brunswick and Newfoundland had done so. There is a real concern that Nova Scotia residents who wish to gamble – including VLT players – will go out of province to indulge themselves. Their options not only include neighbouring provinces but also traditional gambling centres such as Las Vegas, Atlantic City, and the Caribbean, as well as the Internet.

The Internet is a particular concern since it is presently beyond regulation and located outside Canada:

Web-sites began offering Internet gaming in 1995. This new "industry" has grown appreciably since then and now offers substantially more sites to choose from along with almost every type of gaming activity imaginable. Advancements in Internet security and in the speed of play have made gaming on the Internet more attractive to consumers and allowed this new industry to expand very rapidly. The equipment and software required to develop a site, and the low operating costs, have made Internet gaming an attractive business venture for many companies. Types of gaming activities on the Internet include lotteries, sports and race wagering, virtual casinos and many gaming related sites.<sup>46</sup>

On the other hand, although Internet gambling is burgeoning, it does not offer the same experience as a casino or even a game machine site, so its potential should not be overestimated.<sup>47</sup>

Gambling also supports a certain number of jobs. VLTs probably sustain some smaller, marginal licensed establishments,<sup>48</sup> and may have encouraged the expansion of some larger operations.<sup>49</sup> On the other hand, some would argue that support of this branch of

---

<sup>46</sup> NSAGA, *Annual Gaming Report 1997-1998*, Volume 1, p. 200.

<sup>47</sup> *Ibid.*, pp. 205-206. Currently, only 1 per cent of Nova Scotia adults indulge in Internet gambling (pp. 56-57).

<sup>48</sup> *Pers comm.*, Bob Kuzniak, Sheraton Casino, Halifax.

<sup>49</sup> *Pers comm.*, K. Murphy.

our economy is neither necessary nor desirable.<sup>50</sup> It is arguable that if monies gambled were spent for other purposes in Nova Scotia they would generate similar employment in different economic sectors. Indeed, depending on the relationships between expenditures and productive economic activity, spending diverted from gambling might generate more economic activity. Economic assessments of gambling activity have been done in Nova Scotia;<sup>51</sup> however, we are not aware of an economic assessment that focuses directly on VLTs. Chapter 5 of this report addresses this gap.

Another less utilitarian argument – but the most valid from the perspective of players – is that many people, in Frank Scoblete's terms, find gambling fun. VLT play, like other forms of gambling, is entertainment. Focus Group investigations by Sterling Research published in the NSAGA *Annual Report, 1997-1998* found that VLT players enjoy trying to "beat the machine," socializing with other players, and getting away from daily worries.<sup>52</sup>

Although non-gamblers might question the quality of these experiences, they are apparently satisfactory to players. The research by Sterling, which involved discussions with gamblers only (i.e., no non-gambling members of the general public), suggests that players on balance consider the costs and benefits of their indulgence to be minor. Few claims were made for mental or physical benefit besides some psychological relief. On the other hand, few of the players whom Sterling interviewed considered that their gambling influenced their behaviour in home, work, or other environments. They also, for the most part, indicated limited awareness of individuals with significant problems that could be clearly related to VLT play or other gambling. Chapter 4, following, extends this research through new, more broadly-based Focus Group investigations conducted by Sterling for this study.

A final and frequently cited argument against a ban is based on the historic experience of the United States in attempting to ban alcohol. America's period of prohibition in the 1920s and 1930s was, as most people know, characterized by widespread public lawlessness. This was only resolved by a return to a legal, regulated regime of alcohol production, distribution, and consumption. Many interview and Focus Groups subjects that we spoke to – even some who are ostensibly anti-gambling – raised this spectre.

---

<sup>50</sup> *Pers commun.*, Sgt. K. Brown.

<sup>51</sup> See for example Cassman Economics, "An Economic Impact Analysis of the Construction of a Permanent Casino in Halifax," in NSAGA, *Annual Gaming Report 1997-1998, Volume II - Appendices, Appendix I*.

<sup>52</sup> Sterling Research Incorporated, "Two Sides of Gaming: Perceptions of the Social Costs and Benefits of Gaming Among Regular Video Lottery, Casino, Bingo, and Lottery Players," in NSAGA, *Annual Gaming Report 1997-1998, Volume II - Appendices, Appendix G*, pp. 6-7.



In the same light, many of our contacts questioned the logic of banning VLTs when other gambling options and other vices remain legal. There are many activities that are legal, and both regulated and unregulated that can have consequences at least as serious as uncontrolled VLT play. One, to be sure, is drinking alcoholic beverages, especially when it is combined with driving a car. When undertaken compulsively, furthermore, there are serious consequences to many activities that are, in most situations, considered benign or even beneficial. Members of the Standing Committee, for example, pointed out such common problems as individuals who watch too much TV or play too much golf, or even work too much.

Given that many problem VLT players appear to pursue several activities compulsively, it is also argued that banning VLTs would not alleviate their suffering. Statistics, as noted above, show regular VLT players indulge in other forms of gambling and often have other vices, notably smoking. A VLT ban would simply cause these individuals to shift to other activities with similar consequences, incurring similar social costs for rehabilitation.

### 3.3 Current and Potential Responses

Bill 17, which mandated this study, is a reflection of Nova Scotia concerns with VLTs. It has fixed the number of VLTs permitted in the province at their current level. The purpose of this study is to provide information on which the legislature will base its decision whether or not to extend the current moratorium, ban VLTs, or adopt some other measure or measures to alter their operation. If action is deemed to be necessary, measures could include:

- further reduction in the number of machines and/or the locations in which they are permitted
- modification of VLT machines to alter their playing characteristics
- methods to limit VLT play by specific users
- public education concerning the operation of VLTs and problems associated with excessive play.

Some members of the Standing Committee have also suggested that the restrictions of Bill 17 should be lifted. Although we have no clear measure, we have no doubt that they represent the position of many members of the public.

There is, however, a clear acknowledgement from many sources, including NSGC, that the negative impacts of VLT play should be mitigated. In June 1997, for example, problem gaming "banners" were placed on all VLTs in Nova Scotia "to provide information to deal with problem gaming initiatives." NSGC also notes that "all VLTs in Nova Scotia have specified shutdown and start-up time[s] based on their liquor license to help alleviate after hours play."<sup>33</sup>

---

<sup>33</sup> Information from NSGC to Porter Dillon, April 20, 1999.

NSGC has also instituted a "Responsible Gambling Initiative" within which it has launched "a comprehensive VLT strategy." The first major thrust of this strategy is the VLT Request for Proposals to replace up to 3,300 VLTs in Nova Scotia. A key criterion for considering bids, carrying a 40 per cent weighting, is "to promote responsible gaming and mitigate problem gaming."<sup>54</sup> Among the potential modifications NSGC staff expects to be considered are information on machines to let players know about problem gambling programs, information to players on the time they have been playing, modifications to slow the pace of play, introduction of skill options, and modifications to increase entertainment and interaction with other players, such as competitive games. The Commission has also engaged two internationally recognized gambling experts - Dr. Howard Schaffer, Director of the Division of Addictions at the Harvard Medical School, and Dr. Harold Wynne of Wynne Resources in Edmonton, Alberta - to assist with proposal evaluation, field testing, and selection.<sup>55</sup>

As noted also, the NSGC contributes to the Nova Scotia Gaming Foundation, which is funding a "VLT Harm Reduction Study" now under way at Dalhousie University. The study is assessing the characteristics of current VLT machines and the environments in which they are placed. The study is experimenting with modifications that should reduce the appeal of the machines to individuals with compulsive tendencies. These changes are likely to include means to inform players of the odds of winning and the dangers of excessive play, to slow down play, and to remove options such as game bonuses that appear to be particularly attractive to problem players.

A member of the Standing Committee, however, raised countervailing concerns that VLT machines and the environments in which they are placed are being modified to facilitate player expenditures. Specifically, MLA Jerry Pye observed that Automatic Teller Machines are being placed in many bars, often near to VLTs. He also voiced a rumour that VLTs produced in response to the forthcoming NSGC tender will be designed to accept bills, and credit and debit cards. He suggested strongly that such modifications should be forestalled given the stimulus they might give to over expenditure by problem players. NSGC could not confirm whether or not the new machines will accept bills or credit cards but noted that such modifications will be considered in the context of the Responsible Gambling Initiative.<sup>56</sup>

---

<sup>54</sup> Addendum 1 - January 21, 1999, to Atlantic Lottery Corporation Inc. as Agent for the Nova Scotia Gaming Corporation "Request for Proposals - Video Lottery Terminals (RFP # 98 - 17)," Section E: 17.0 Evaluation of Proposals.

<sup>55</sup> *Pers. comm.*, Dara Gordon, Q.C., Chair, NSGC.

<sup>56</sup> According to Appendix C (C.3. Bill Acceptors) in "Request for Proposals - Video Lottery Terminals (RFP # 98 - 17)," Bill Acceptors will not be permitted "unless approved by the Nova Scotia Alcohol and Gaming Authority." VLTs in New Brunswick and Newfoundland already have bill acceptors.

Play can also be influenced by several measures separate from the machines themselves. For example, establishments could further restrict the hours during which the machines are available for play. One potentially effective approach might be to set breaks of an hour or more every few hours so that players will not be able to gamble continuously. Another would be to encourage the staff of licensed establishments to "cut off" VLT players just as they can refuse to serve patrons who they believe are drinking excessively.<sup>57</sup> The second thrust of the Responsible Gambling Initiative is a "Retailer Training and Education Program," which will provide retailers and their employees with education and training to address issues related to responsible gaming and problem gambling. The program is, however, currently under development, so its specifics cannot be described. NSGC is also reviewing VLT premises in consultation with Drs. Shaffer and Wynne during 1999 to determine whether machines should be relocated or their surroundings modified at individual sites.

Nearly all our contacts through interviewing and Focus Group consultations (see Chapter 4 following) feel that public education would be beneficial. We found that most players and non-players are not well-informed about the true rate of problem gambling. We also found most players had a poor idea of their odds of winning. Information on VLT displays to inform players of relevant statistics and odds is a possibility we understand is being explored by the Dalhousie study. There is also potential in counter advertising as is now common in the cigarette and advertising industries to clearly inform players of the potential consequences of over indulgence.

Again there are relevant initiatives under way. The Focal Survey, sponsored by NSDOH and described above, has provided important information on VLT players and problem players. The Department of Health also established the "Drawing the Line" education program, which is now available in French and English, to teach junior and senior high school students about responsible gaming and problem gaming issues. Other information outputs from NSDOH include a video on problem gambling called "Romancing the Odds" and a web site for problem gambling. We also recognize that NSAGA sponsors various types of research and prints an excellent annual report, editions of which have been heavily relied on for this research.

It remains a question whether the many initiatives of NSGC, NSAGA, and other government agencies are adequate. The large number of programs represents a recognition of the seriousness of problem gambling and each appears to be a positive gesture to reduce its occurrence and/or mitigate its impacts. Problem gambling persists, however, and further programs were suggested by stakeholders, particularly more extensive education and more funding for treatment.

---

<sup>57</sup> *Pers comm.*, K. Murphy. Mr. Murphy suggested guidelines would have to be developed to support operators in such cases. Separate information from NSGC states they are investigating the possibility of establishing a voluntary exclusion program for VLT players who wish to ban themselves from a particular establishment to help address their VLT play. A similar program has already been implemented in the two casinos.

It is, of course, possible to accept the problems associated with VLT gambling. VLT players, after all, are not forced to use the machines. There are also no substantial, inherent health risks such as are associated with many other "victimless" practices that are regulated or illegal such as smoking, drinking, drug-taking, or indulgence in sex for money. Evidence indicates that many gamblers are subject to co-dependencies and are generally involved in other gambling activities (see Sections 2.3 and 2.4, above).<sup>38</sup> This suggests that problem VLT players will simply transfer their time and money to one or more of these habits – if not to illegal gambling – if the machines are banned in Nova Scotia.

In that event, some fear the Province of Nova Scotia may lose a good portion of the 1.6 per cent of its revenue that it derives from legal VLT play. This money and other expenditures by VLT players may leave Nova Scotia for other jurisdictions in which gambling is legal. It may also be expended on remaining legal options in Nova Scotia, from the two provincially-regulated casinos and gambling centres on First Nations Reserves to charitable gambling or the lotteries. It may also transfer to activities that some would deem worse than legal gambling such as illegal gambling or drug-taking. Alternatively, it could go to needed family expenditures and/or to more benign entertainment options.

---

<sup>38</sup>

The Focal Research survey, for example, found VLT players are more likely to smoke than non-VLT players. They also found that whereas non-VLT players spend an average of \$82 a month on gambling and entertainment, VLT players spend \$435 on average, of which an average \$243 goes to VLTs. The remaining \$192 is primarily spent on other forms of gambling.

## 4.0 FOCUS GROUP RESEARCH

A key component of our research was the conduct of six Focus Group sessions in early 1999. Focus Groups are group interviews facilitated by a trained moderator who introduces successive topics and guides discussion about them. They are an invaluable tool for uncovering qualitative information. One strength of Focus Groups is that they stimulate group interaction. The findings come out of participants' reactions to each other. This is, however, also a weakness, since participants will react to different people and stimuli in different ways. For instance, we have no way of knowing whether the participants had considered either the positive or negative aspects of video lottery gambling before we introduced the concepts in the groups.

*We further caution that as a qualitative method of research Focus Groups should only be generalized to the larger population with care and supporting evidence. This does not mean that the findings are not accurate. It simply means that Focus Group information does not provide the type of quantitative measure typically yielded by a sample survey that will allow the analyst to extrapolate findings to the larger population based on mathematical probability theory. For this study we are fortunate to have the published results of the Focal Research survey, which we have outlined above. Their data have been valuable to us in inferring our Focus Group results to the wider population.*

### 4.1 Focus Group Background

The six Focus Group sessions were equally divided between a site in Metropolitan Halifax and another in New Glasgow. Halifax was selected as the most appropriate urban site because it accounts for roughly one-third of Nova Scotia's population and because it offers the alternative of an easily accessed casino, if VLT gambling ceases to be available. New Glasgow was chosen to represent more rural parts of the province, notwithstanding that New Glasgow itself is one of the larger urban communities in Nova Scotia. Pictou County in which New Glasgow is located has one of the highest rates of VLT use in the province. The area is also sufficiently removed from existing Nova Scotia casinos and the New Brunswick border that VLT users will have to consider alternative forms of gambling or recreation activity to VLTs, if VLTs were to be banned.

In each case, we undertook sessions consisting of non-VLT players, regular VLT players who are not displaying signs of problematic behaviour, and regular VLT players who expressed indicators of a serious problem controlling their video lottery play. The primary purpose of our Focus Group investigations was to determine what social problems related to VLT use might be reduced or augmented in the event of a VLT reduction or ban. We also hoped to determine the likely behaviour of VLT players in the event the machines become less readily available.

Each participant was randomly selected using the telephone directory and a screen provided in Appendix B. We selected all of the participants on the basis of specifications

of the Canadian Professional Marketing Research Society. The group of non-VLT players was screened on the basis of never having played video lottery and not having a gambling problem based on the South Oaks Gambling Screen (SOGS). The non-problem and problem players were screened using the SOGS. Two participants in the non-problem group scored 2 out of 20 points and the remainder scored 0 points. All of the problem players scored between 10 and 17 points. The SOGS is thought to overestimate problem gamblers in the general population, but a score more than 10 should minimize any risk of not obtaining a "true" problem gambler.<sup>59</sup> Table 4-1 summarizes participation in the six groups.

The Project Team developed a discussion outline as shown in Appendix C. Each group began with an introduction to the Focus Group process and a 'warmup' period to help participants feel comfortable talking with each other. Once we explored what gambling and leisure activities people were involved in, we began the main focus of the group discussion.

All Focus Groups were audio taped and several were observed by consulting team members and others involved in the study.<sup>60</sup> Data from Focus Groups consist of participants' comments and agreements or disagreements among group members. These are considered when analysing the findings. We conducted the analysis by transcribing the audio tapes from each group and then examining verbal and nonverbal data for trends. Body language and non-verbal interaction were also taken into account based on the notes and recollections of the Focus Group facilitator.

Among non-VLT players, two of eighteen participants do not gamble at all. Both of these individuals prefer to spend their spare time on computers. Among the remainder, sixteen participate in on-line (649, Super Seven) lotteries and regularly purchase instant tickets (scratch and/or pull tabs). Four female participants play bingo - mainly to get out of the house - three participants have occasionally visited a casino to play slots, and one regularly goes to a casino to play cards. The type and amount of time spent on leisure activities varied by participant. Most engage in some type of sports activity, dancing, gardening, and/or spending time with their children. Two participants engaged in more solitary activities, such as collecting stamps and toying with computers. With the exception of bingo, gambling was not viewed as a major part of the participants' leisure time.

---

<sup>59</sup> Although the 'problem players' all scored a minimum 10 of 20 points on SOGS (a screen for problem gambling), a clinician was not present to give each participant a clinical assessment. The DSM-IV states that clinicians trained in problem gambling should ideally provide an assessment for pathological gambling. Therefore, while we observed that the players included in our "problem players" Focus Group are experiencing severe difficulties, we cannot state that they fall within the pathological range of gambling.

<sup>60</sup> The latter individuals included a MLA member of the Standing Committee on Community Services and a staff member from NSAGA.

**TABLE 4-1: Focus Group Participation, Halifax and New Glasgow, 1999**

Halifax			
Group	Males	Females	TOTAL
Non-players	3	5	8
Non-Problem Players	5	2	7
Problem Players	4	5	9
New Glasgow			
Group	Males	Females	TOTAL
Non-players	3	7	10
Non-Problem Players	5	1	6
Problem Players	4	5	9

The participants in both urban and rural groups have played video lottery between one and eight years. We did not observe any difference between non-problem players and problem players in terms of the duration they had been playing. For instance, twelve participants across all four groups of players in Halifax and New Glasgow have played video lottery for five years or longer. However, six have serious difficulties controlling their play, while six appear to have no problems.

## **4.2 Non-Problem versus Problem Players**

While there were no apparent differences in duration of play for non-problem and problem players, for non-problem players video lottery is an addition to other leisure activities, whereas the problem players appeared to organize their lives around playing VLTs. We observed that many non-problem players were involved in activities that encompassed social interaction, such as going with friends to a bar, playing darts, hockey, and other sports. Almost all of these participants stated that video lottery had not interrupted these activities. Conversely, before beginning to play VLTs, most of the problem players were involved in solitary activities (e.g., crafts, drawing, going for walks, watching television). Two of the problem players said they had always spent time with their children, which had not changed. Additionally, four began playing video lottery after a significant life event. These included break up of a long term relationship, a debilitating accident, job loss, and retirement. With these latter four individuals, playing VLTs began as a way to combat boredom and listlessness.

(M) "If I had of been working, I don't think I would have bothered with them machines. But I had nothing to do. The days and nights were too long, and I didn't have a hobby." (F) "I lost my job, and I found that not working, you have too much time on your hands." (F) "Before I worked, and then after the accident, I was depressed all of the time and bored, so I started playing the machines."

In short, the non-problem players had not experienced any significant shift in their recreational or other life circumstances, whereas the problem players had mostly replaced whatever they formerly did for leisure with video lottery. The major lifestyle changes some of these people experienced may also have contributed to the development of VLT problems.

A second divergence between non-problem and problem players was the reason they gave for playing VLTs. Most non-problem players played VLTs to "pass a bit of time." They generally played while having a drink, waiting for friends, or for recreation. These participants played to win, but had fairly low expectations of winning. They do not view winning as their main reason for playing:

**Non-Problem Players:** (M) "It's entertaining and it doesn't cost a whole lot." (Another M) "Well, when you win, you get your winnings, but you seldom win." (F) "I never win. My husband will win sometimes but I never do." (M) "I was a little ticked off at . . . and I went in to have a beer. The beer cost me five bucks and I tossed a few 'loonies' in to the machine and won \$140, and it was a perfect end to a lousy day." Moderator: What if you would've lost that money? (Orig M) "Well, I write it off anyway when I put it in." (Another M) "I think you almost have to."

With a few exceptions, non-problem players do not go to bars or licensed establishments solely to play video lottery<sup>61</sup>. Playing a VLT is seen as an 'afterthought' once they are at an establishment that has machines.

Problem players, by contrast, go out specifically to play, and the two reasons given for playing "the machines" were for "the challenge" and to "win":

<sup>61</sup> During the discussion, one "non-problem" player displayed signs of a problem, and may in fact be in the process of 'crossing the line' from a leisure player to a problem player.



**Problem Players:** (F) "I find when I'm playing, it's like it's teasing me. It goes really high and then really low, and you're like, 'oh I know it's going to go any minute,' and then you lose. And an hour later you're back and someone wins, and you're like, 'oh if I had of only stayed on that machine.' You keep wanting to play because you know somebody's going to get it." Moderator to group: Is this similar for others? (Agreement) (M) "You're not there to lose, you're there to win." (Another M) "You win \$700 one day and you lose \$1,000 the next day."

Finally, both sets of VLT players participated in various forms of gambling before playing VLTs, and most still do. The consensus across the non-problem groups was that video lottery has not replaced their previous gambling activities. For example, most of the participants claim to still purchase raffle tickets for what they consider worthy causes, and those who attended bingo before playing VLTs still do:

**Non-Problem Players:** (M) "I used to buy scratch tickets." (others agree). (F) "Bingo occasionally, and we used to play cards every Friday night." Moderator: Would you say that VLTs are something that has replaced the other gambling activities you might have been involved in? (M) "It's just an add-on. (Others agree) You still go out and buy scratch tickets, and you still go to the bar and see the VLTs. It's two different situations."

The major difference between the non-problem and problem players can be seen in their levels of gambling both before and after starting to play video lottery. Approximately one-quarter of the problem players wager large sums of money on instant and on-line lottery tickets, bingo, cards for money, and other gambling activities. Many of the problem players had substantially altered their expenditures from other forms of gambling to VLT gambling. A few individuals in each of the problem player groups still spend \$100 or more per week on instant and on-line lottery tickets. Nevertheless, it is clear that VLT play is their gambling activity of choice:

**Problem Players** (F) "Years ago, I used to go to bingo about four times a week. After having my second child, I just didn't have time for it. I didn't have trouble giving that up, whereas the machines are a different story."

(M) "I pick up the occasional 'lotto' ticket and I buy scratch tickets."

Moderator to group: How much would you be spending on scratch tickets in an average week? (First M) "About \$30 to \$40." (Another F) "I spend

about \$20 a week on scratch tickets." (Another F) "I only wish! I spend

about \$100 every week on scratch tickets." (Another M) "Forty bucks."

(Another M) "We still have rummoli night, every second Friday night.

That can be costly too, we play quarters a thing, instead of a penny. I used

to get depressed when I lost a hundred bucks at that, and now I can go out

and spend \$200 on a machine, and I'm going home to get some more

money, you know? [VLTs] have replaced everything for me."

As illustrated, many of the problem players displayed signs of excessive gambling behaviour in other activities, particularly instant (scratch and break-open) tickets. For example, one individual claimed she recently wagered \$1,600 on bingo with her partner during a week-long trip to Toronto. Their combined winnings for the week were \$190. This woman resorted to playing bingo because, "there's no machines over there."

### 4.3 Impacts of VLT Play

We asked all of the participants to describe both a regular VLT player without problems and a VLT player with problems. The consensus across all of the groups was that there are no demographic differences that predispose a person to develop problems with video lottery. The participants across the groups claimed that people of all ages, income levels, gender, marital status, and occupations could develop problems with their play.

We did, however, observe a difference in perceptions about what leads to problem play with video lottery. The participants who had not played in the past and the problem players were more likely to mention that the machines were "addictive." One problem player referred to the first time they had won on a VLT: "Like the Devil. It's down your throat and it pulls out your soul." Conversely, regular non-problem players asserted that problem players had other "issues" that led to their excessive play. A few of these people thought that psychological characteristics led to development of problems with video lottery play, but they could not elaborate as to what characteristics we might look for.

#### 4.3.1 *Perceived Positive Impacts for the Individual*

##### • **Non-VLT Players**

There was overlap between the urban and rural groups in their perceptions of positive impacts for the video lottery player. Both groups suggested that video lottery for leisure players could be exciting, fun, an escape from daily pressures, and a chance to get out of the house. The rural group appeared to focus more on social aspects of video lottery play. Most of the individuals in this group agreed with one participant who stated that establishments with VLTs encourage mingling among players and non-players. A widow in the rural group suggested video lottery provided a place for single people to go unaccompanied by a person of the opposite gender. They felt that going to a licensed establishment to play video lottery would preclude people from "hitting" on them. Others in the group agreed with this point.

When the discussion turned to problem players, the urban group decided that the odd win is the only benefit for someone who cannot control their play. The rural group also thought of the odd win, but a few felt it would also be an excuse for women to get away from abusive relationships for short time periods. Others disagreed, saying it can only make the situation worse. Lastly, two participants considered problems with video lottery would keep the person from becoming involved in what they considered to be worse addictions, such as drugs.

##### • **VLT Players**

We observed a major difference between non-problem players and problem players in that the non-problem players felt they obtained many more favourable results from playing video lottery. Non-problem players from both groups cited winning (but quickly added they seldom win), excitement, entertainment, and relaxation/break from daily pressures. Once again, the rural group was more inclined to mention social aspects associated with video lottery, such as couples and spouses playing together, and a place to meet and mingle with people. One participant from the rural group said he often obtained contract work by hanging around the machines and talking to the different people there. We have noted this in other Focus Groups with regular video lottery players. Lastly, a few people from the rural group said that it was a good pastime if they were in a bar with people who had become too drunk to spend time with, or if they were waiting for a pool table to become free, and so forth.

The problem players in Halifax had a limited discussion about positive attributes of playing. Participants in both groups cited the enjoyment of winning as the largest benefit they derived from playing VLTs. However, they routinely reinvested their winnings until they had run out of money. The rural problem participants stressed socializing more than the urban group. Discussion in the rural groups centred around video lottery as a meeting place. Most of these participants felt that if you did not know the other players, you would soon meet them. For a few of the participants, it was also a chance to escape from daily pressures. As one participant put it, "if I'm really stressed, and I can't deal with it, out the door I go." Finally, three rural participants felt that losing a large sum of money in one

session was positive, because it "scared" them away from the machines for a week or two, allowing them to save money.

#### **4.3.2 Perceived Positive Impacts for the Family**

##### **• Non-VLT Players**

Rural non-VLT participants appeared to find more benefits from leisure VLT play than urban participants. Nonetheless, both sets of groups considered the benefits for the family to be limited, and non-existent for families of problem players. The rural group considered stress relief from daily pressures, a pastime, and shared winnings all to be possible benefits for the family of the leisure player. The urban group was divided about family benefits, but they did agree that it depended on the amount of money the leisure player was spending, and whether the family could afford the expenditure. Beyond this, about half the group thought of shared winnings and the chance to get out of the house.

##### **• VLT Players**

Both non-problem and problem players had difficulty identifying benefits that accrue for their families as a direct result of playing video lottery. About half the urban group and the rural group of non-problem players said they share winnings with their families by purchasing things they might not otherwise. People in the rural non-problem group further claimed that many couples play video lottery together as a form of entertainment. They also contend it provides an escape from family pressures. One person in the rural group thought that when problem players win, it is a chance to get caught up on their bills. The remainder of the group disagreed. The urban group of non-problem players could not think of anything remotely positive for a problem player's family.

The urban problem players said outright that their families do not derive any benefits from their video gambling. The rural group differed in that they all agreed that they shared their winnings with their families. We note, however, that this was contradicted by earlier statements that they almost always play until their money is gone. Thus, sharing of winnings is likely to be limited since they rarely walked away from a session with any. Several problem players said that the only other positive attribute for their family was if they were in a bad mood, they would take it out on the machines instead of their families. While this may be true, the 'benefit' is negated by reports of constant arguing over their video lottery play.

#### **4.3.3 Perceived Positive Impacts for the Community**

Participants across all of the groups considered tax revenues and/or monies for the local economy to be a positive aspect of video lottery gambling. Nevertheless, there were slight differences by group. For instance, the urban groups considered both liquor licensees and the government as benefiting from revenues accrued through VLTs. Still, non-players thought of the revenues for government as positive, although the need to provide for people who have "lost everything" to video gambling diminishes these benefits. Roughly half of the urban non-problem players said that the additional revenue was not beneficial because if it was not spent on video lottery, it would be spent elsewhere. The government

would obtain the revenue either way. Problem players in the urban group considered themselves to be maintaining many liquor establishments, and they also noted revenues that they directly provide to the government.

The rural groups focussed mainly on revenues within their local community. In this regard, non-players and non-problem players felt that any monies that went to sources that provided further benefits for the community, such as a legion, were acceptable. These participants did not feel that revenue to liquor licensees was worth the social costs. Two non-problem participants from the rural group argued many liquor licensed establishments were able to provide donations to the community since they had extra revenues, but the others did not view this as a benefit. Lastly, the rural problem players thought many businesses would fail without their video gambling patronage.

#### **4.3.4 Perceived Negative Impacts for the Individual**

##### **• Non-VLT Players**

We observed in both urban and rural groups an equal split among those who felt that leisure video lottery play had no negative impacts, and those who thought it did. However, several participants claimed their only source of knowledge on VLTs was the media:

**Non-VLT Players:** (F) "My perception is basically what the media portrays, which is not good obviously, that most of the people that get into the machines end up becoming addicted to the machines." (Emphasis hers). (M) "I think what we're exposed to mostly are the problem VLT gamblers. That's what we hear from the media, but they don't talk about that problem with people who gamble on the horses or play bingo and lot's of other things." (F) "Yeah, because these other things are all forms of gambling."

Few non-VLT participants knew anyone who played VLTs, and many did not frequent establishments where VLTs are located. Moreover, very few participants from non-players to problem players knew the percentage of people who are 'problem VLT players.' This does not mean these participants' perceptions are inaccurate. However, their opinions will be influenced in part by information provided to them.

The biggest problem identified among non-VLT players was the threat of addiction:

**Non-VLT Players:** (F) "The negative thing about [Video Lottery] is they're addictive." Moderator: So they are addictive to the leisure player? (F) "I think they would face the possibility of becoming addicted." (M) "The leisure player, the addicted people always start out as leisure players. They are taking their first steps to becoming addicts."

Another point raised in the groups was the possibility of spending more time or money than one could afford to. However, this was viewed as a moot point by a few, who maintained a person could spend more time and money than intended in a variety of leisure activities, including other forms of gambling. Some participants in both sets of groups also thought that video lottery gambling was a waste of time, and that the people who played it for entertainment could be doing something more constructive, such as spending time with their families. This was also met with debate by other participants, who contended it was up to the individual to choose what they did with their money and time, provided they could afford it.

Where the groups were divided on negative impacts for leisure players, they agreed on adversities that problem players face. These included potential loss of family, job, car, house, and all other material possessions, which may or may not comprise personal and/or business affairs, to the point of bankruptcy. They also felt that problem players would lose their friends, and respect in the community, which would lead to lowered self-esteem. They considered the lifestyle of the problem player, and the participants felt that problem players would suffer from health problems caused by eating disorders, lack of sleep, and anxiety/depression. Some believed that in desperation, problem video gamblers would commit crimes to keep playing or pay off loans and bills, and may commit suicide as a result of their video lottery play.

#### • VLT Players

We asked the non-problem players what - if any - difficulties they could attribute to video lottery gambling. Across both urban and rural groups, almost all of the non-problem players said they had spent more time and/or money at the machines than they intended at least once. Several participants in both groups also considered the machines to be "addictive":

Non-problem Players: (M) "There's the possibility you might get addicted." (Another M) "Yeah, very addictive." (F) "Spend more than you planned to." (Another F) "Sometimes you end up staying longer than you planned. You had something that you should have done and you miss it." (Another F) "Yeah, but you can do that just going to the bar." (M) If a person occasionally overspends, you end up staying longer than you normally would."

Two in both groups claimed that they overspend "occasionally." One woman, who we consider at risk of developing problems, reported spending her grocery money twice. Still, the majority of the players claimed to play when they have a bit of time to pass, and they do so while having a beer or drink at a bar. They reported expenditures that rarely reached more than \$20. They generally played between fifteen minutes and two hours in a session.

The problem players reported many more serious negative consequences than non-problem players. These include financial, social, psychological, and health problems. Moreover, in one instance, a problem player reported resorting to illegal activities to finance their video gambling. Specific situations were generally mediated by source of revenue and social resources. Three of the nineteen were unemployed, and the remainder was either employed, had dual sources of pension revenue, or had disability insurance monies and disability pension revenues.

All of the problem players reported financial difficulties, with some in worse positions than others. Several reported having "wiped out" their savings accounts and "maxed out" their credit cards. The reported out of pocket "expenditures" among problem participants ranged from \$200 to \$1,000 per week, which for many did not include other gambling expenditures.

As noted above, most had fixed incomes or were working. They all reported financing their play by borrowing, lying, and "scamming" to obtain money for video lottery. Two students used their entire student loans to play VLTs. For one student this amounted to \$14,000. Players who were employed said they routinely put their entire pay cheque into the machines. Almost all of the problem players were behind in their bills:

**Problem Players:** (F) "I'm right now, six months behind in my rent. I have no phone bill paid, and no hydro paid." (Another F) "I was always dead set on using my credit. Like my credit's not ruined but it's gradually getting there. I had my Visa paid off three or four times. I have a \$1,500 limit and it's back a week or two. There's no boundary, you have no concept of it." (M) "Using rent and food money that you should be using for your rent and groceries." Moderator to group: How often does that happen, rent and food money? (F) "Every pay." (Two others agree). (F) "You're losing money. There's no question about that! Sometimes you win and you can put some back, but I loose more than I win."

Three participants from the urban group seemed to be in serious financial difficulties. They had not paid any of their bills, including their rent, for four to six months. The remainder claimed to be juggling their bills and VLT play in a planned manner in order to continue playing. A few used tactics such as punishing themselves if they overspent (in these cases, more than \$50 in a day), or placing a "mental block" and avoiding people with whom they usually played. This generally meant not gambling or socializing with anyone for a week or two. Several other participants rotated bills and paid them as soon as they obtained money, leaving the bulk for video lottery. A few participants pay all their bills, but lie to their spouses as to how much each bill is in order to have additional monies for play. Two admitted selling personal effects, including a valuable piece of land received as an inheritance. One person also remortgaged a house trailer that had been paid off. This individual rented out rooms to two people to get income for video gambling.

Family arguments and strained family relations were prominent. Many of the problem participants stated their extended family relations were "nonexistent," one person reported being separated from their family, and others said they were hiding their video gambling activities because there would be 'war' if their family found out. A few participants said their families had tried to intervene, but they were not willing to listen. One person had "come clean" with their family who helped "bail them out," but they soon began playing VLTs again and are now terrified their family will find out.

None of the players reported losing friendships over their video lottery play. There appeared, on the other hand, to be a comradery among the problem players in our Focus Groups, all of whom knew each other quite well or had met in the past. We observed jargon known only among problem players has developed for video lottery play. For example, a "hopper" is considered a player who does not remain at one machine but moves from machine to machine. The development of jargon for a deviant activity is often a sociological indication of group cohesion. Thus, while speculation, these people may have replaced their friends who do not play video lottery for acquaintances who do.

All of the employed problem players said they had either missed work to play VLTs or because of playing them. For example, they would play late into the night and not get up for work the next morning. Others reported going back to obtain bonus credits they had left on the machine the night before. Most employed problem players reported having been late for work for the same reasons. Many of the participants had lost jobs because of their problems, but they quickly found other work, mainly because they are generally in low skill but high demand occupations.

#### **Profile of a Problem Gambler**

We held an in-depth interview with a male in his mid-forties who lost his home and family after approximately six years of VLT gambling. This individual began playing VLTs in 1991, when they were still in corner stores. He stopped in 1997. Before playing the machines he occupied his time bowling and as a drummer in a band. He also occasionally bought 649 and scratch tickets.

When the machines were first removed from corner stores, he stopped for a while. When he began to play them in the bars, he could still go without gambling at times. He, consequently, managed to cover his gambling from his family. His income was approximately \$3,100 per month. After he paid all the bills, he still gave his wife about \$200 for the household. He gambled with the remainder.

He did not worry about the consequences of his gambling at first, as he was not arguing or lying about it nor was he spending household money. He did not play when his family was at home or in the evenings. Nights were spent at home watching TV and videos with his family or playing board games, or going out to shop. Nevertheless, he claimed he



remained distant with his family, as he was thinking about gambling even when he was around them. The time spent with his family was not quality time. He said he did not feel he was being a "true father" to his children, as he did not buy them speciality items like clothes other children had. Instead he gambled with money that he could have used for these extras. Toward the end, he began to lie about his gambling and became nervous, having panic attacks and dreaming about VLTs. He also began to avoid his family, while selling some personal effects to maintain his gambling. He never, however, spent any household money to gamble.

When his spouse first discovered he was gambling on video lottery machines, they argued, but this did not last long. He worked from 1989 through 1994 but eventually lost his major source of income when a competitor underbid him on a contract. At this point, he had lost \$50,000 on VLTs but had not accumulated any debt. Wishing to pursue other options, he remortgaged his house to borrow \$17,000 to get a small business going. He decided to gain back his losses from VLTs, but lost his borrowings at the casino in three weeks. He also sold more personal effects to keep playing VLTs but ultimately lost the equity in his house. Eventually the bank foreclosed on his mortgage. His family left him over this breakdown in trust.

After it finally sank in that his family was gone, he stopped playing VLTs. About a year after they left, he went to Drug Dependency and took a Core Program. He and his wife are not divorced but she is seeking a separation agreement. They still see each other and he visits his daughter at her place of work. He, however, is unemployed and having difficulty finding a job. He is on social assistance, and twenty months after he had stopped gambling, he says he is no better off now than when his family first left.

He spent an average of \$300 to \$400 a week on video lottery. In addition to his family and home, he lost friends, self-esteem, motivation, values, and pride. He thinks VLT gambling hurts the families of the gambler more than gamblers themselves. Based on his personal experience, he feels that Nova Scotia should ban video lottery machines to prevent new potential addicts from being introduced to them. He recognizes that a ban may force the machines underground and present "problem gamblers" may seek them out to continue playing. It is unlikely, though, that as many people would play and new players would not start if the machines were not readily available. His stance is that the machines are home wreckers for all VLT "addicts" and they hurt innocent people - the families of the gamblers.

When questioned about the right to choose, he said the Province should take VLTs away, "for the good of the players," just as the government made seat belts mandatory to protect people. He also feels that casinos should be less available to people for much the same reason as the VLTs. He made it clear that he was not addicted to the casino games and claimed he gambled for the excitement not because of any personal problems.

Negative psychological effects were also evident. Many participants spoke of embarrassment and a loss of self-esteem as a result of their expenditures and inability to control their play:

**Problem Players:** (M) "The embarrassing part of it too, are the people standing behind you watching. They don't play, they just stand behind and watch, and you've put \$400 into the machine and they're standing behind you and saying you shouldn't have put it in and all this stuff." (F) "You'd swear it's a licensed addiction for them." (A few are visibly distressed by this) (Orig M) "It's bad enough to lose it, but they've got to turn around and start rubbing it in. So it makes me kind of embarrassed." (F) "It makes you want to turn around and hit that person in the mouth, and say, 'Don't criticize me. *This is what I want to do. You don't do it, that's your business. What I do is my business.*'" (Emphasis ours). (M) "They don't say much when you win \$500." (Orig F) "No, they'd be patting you on the back saying, 'can you buy me a drink?' Not!"

We observed feelings of guilt and anger among approximately half of the problem players over their inability to stop playing or keep their expenditures within limits they could afford. Continuing serious depressive episodes were also seen as common:

**Problem Players:** Moderator: What happens after you lose? (F) Oh, I kick my ass. (M) The next day, you wake up and it's like, 'I'm broke. I can't believe I've done that.'" (F) "We all go through that." (Another F) "I get very depressed when I'm losing." (Another F) "I spent money for a bill, and I've seen myself walk out of there and just cry. Literally, bawl, I feel so disgusted with myself." (M) "I'll borrow \$50 from my mom and tell her it's for cigarettes or something. I'll go down and spend it and it's just horrible. It's very depressing." (F) "I get so depressed, I go for 2 or 3 days and empty the coffee and don't even eat."

Most problem players claimed to leave saddened or depressed after a long losing session, and this would gain momentum during the next day, when they would question why they had acted "so stupidly." For several of the participants, overcoming this depression meant trying to "beat" the machine that day. The third depressive episode described was more insidious, and developed through long-term self-questioning of their behaviour. This led to severe bouts of depression, although none of the participants said they had ever been suicidal. One, however, said they knew someone who had committed suicide, and "part of it was the machines." Several participants reported dreaming about VLTs constantly, and/or not being able to concentrate on daily tasks because they were constantly thinking

of playing the machines. For two students, this was particularly damaging for their studies and both reported being unsure whether they would finish school.

Health problems were not readily discussed but this does not mean they do not exist. Approximately half of the participants claimed that playing video lottery had disrupted their sleep patterns, particularly if they played all day and night. These people went to bed and got up at dark, which incapacitated them to a slight degree. When prompted, most of the participants agreed they do not eat while playing and, if they do, it is not considered healthy food. Several complained of tension headaches and eye strain from viewing the monitor for long periods of time.

Lastly, one participant in the urban group had committed an illegal act to finance their VLT play. Specifically, he deposited empty envelopes at automatic teller machines and withdrew cash off the fake deposits. It is unclear whether these actions will have legal implications.

We observed the duration of video lottery gambling did not appear to play a decisive role in the magnitude of the negative social impacts. While speculation, several factors appear to determine how fast a person with video lottery gambling problems succumbs to financial and other difficulties. Initial financial and social circumstances influence how quickly players are harmed. An individual with a reasonable and reliable income can obviously forestall financial difficulties longer than others on smaller fixed incomes.

Willingness of other family members to step in and help, and of the player to accept the help, may also hinder the process. Again, this might not eliminate negative impacts but may slow them down. Still, the individual's ability to control their VLT play - even for short periods - appears to be most important in temporarily suppressing financial and other difficulties. Many of the problem players claimed to have "quit" playing video lottery for various lengths of time. Two individuals have replaced "swinging bells" at the bars for "swinging bells" on their personal computers, thereby alleviating financial duress:

**Problem Players:** (F) "I had to [cut back]. Everything was getting wiped out. I tried to find other things to do, and staying away from the bars, stuff like that." (M) "If I didn't lock my money in, I'd be broke. I locked my money into the bank for a year so I can't touch it. That's what I had to do." (F) "I've tried that, but mine never stays in the bank." (Orig M) "I put it there after I retired, but I guess I've spent about \$20,000 if not more."

(M) "I quit for a year and I was just putting away all of my change. I saved \$1,800 in seven months, and that was just from 'loonies' and 'twoonies.' And one night, I went out with a couple of buddies and I put a couple of 'loonies' in and bang, I had the bells on a 25, and it just sucked me back in again. Damn."

Approximately half of the problem players had learned to manage their resources around their video lottery play, which included abstinence from play for short periods while they got caught up. Nevertheless, it was clear from all the participants that they were eroding their financial and social resources, some more quickly than others. Moreover, they were all aware of this and many were looking for strategies to control their behaviour.

In short, with the exception of two participants who had separated from their partners, the problem players did not report negative impacts such as loss of a house or other large financial investments. Several participants reported spending large sums of money over a period of four or five years, but they did not report what direct impact this has had on their financial stability. The majority of the problem players we interviewed appear to have not, as yet, whittled down their resources to the point of a crisis situation. This does not mean that financial ruin among the problem players has not occurred but we did not record them as observations.

Additionally, many of the participants were less than thirty years of age and may not have accumulated significant capital assets to lose. All the problem players appeared to recognize they have a serious problem controlling their video lottery play. They are also aware of the resultant negative consequences for them and their families. Still, only four of nineteen participants said outright that they wanted to stop playing VLTs. The remainder claimed they had not yet reached the point where it was necessary to stop. One participant summed up the general feeling across the problem player groups:

Problem Players: (F) "When you're drinking everybody acts stupid. When you play the machines you're being stupid. And I know this, (others in the group agree), but I'm not ready to stop yet. Moderator: What do you think it will take, just out of curiosity?" (Orig 1) "I don't know. I can't answer that question, but I'm not going to let it come to my marriage being broke up or my home."

It is important to recognize that for many problem gamblers, gambling acts as a buffer from emotional or other problems. Even the participants who said they wanted to quit gambling did not know how they would do it. They realized that institutional and other help was available. However, they may not know how, or may not be ready to face, the emotional, psychological, and social difficulties that abstinence will mean for them.

#### **4.3.5 Perceived Negative Impacts for the Family**

##### **• Non-VLT Players**

For both groups of non-players, any perceived negatives pertained solely to monies and time allotted to the family. Thus, a leisure player can have negative impacts on their family if they spend money the family cannot afford or did not allot enough time for the family. Still, many of the participants across the groups did not feel this was confined to video lottery play, or even gambling. Several individuals claimed that spending too much

time or money on a leisure activity would cause problems in the family. It came down to non-problem players budgeting their expenditures and time on video lottery, whereas problem players were simply out of control. The end result for the problem player was believed to be deception, arguments, loss of trust and respect, and the eventual break up of the family.

#### • VLT Players

When we asked non-problem players about negative impacts their video lottery play may have had on their families, two participants in the urban group claimed to have occasionally borrowed money to play, and one had taken out a cash advance on their charge card. One participant in this group claimed to do this occasionally while playing poker, but never while playing VLTs. Another woman admitted spending her grocery money twice, and we have already noted that she is at risk of developing into a problem player. A few people in the rural group claimed to have spent more than they intended on the odd occasion. One person felt that anyone working "back-shifts" at the local plant should be spending time with their children, not playing video lottery. In addition, a few people in the rural group reported occasionally being late for family functions because they had lost track of time while playing VLTs. All of the participants in both groups felt that occasionally spending more time or money than one intended was not injurious to their families. They maintained they had not argued over their VLT play and it was not an issue with their families.

The problem players did not openly discuss damaging effects of their VLT play on their families and it was difficult to engage them in this area. Very few acknowledged their parents, spouses, partners, or children, and when they did, it was to relate a story about how they had deceived them or borrowed money from them:

**Problem Players:** (F) "Like see, if I'm sitting at home, I got no money or anything. There's a big bingo or I want to play the machines or something. Where can I get, you know [the money]? Then, all of a sudden it's like Y, call your mother. My mother's 81 years old. She lives off a pension. I'll call her and ask if I can borrow \$20. 'Yeah, all right.' My shoes are calling, 'Y put me on,' you know?" (Several agree to having similar experience) (M) "I had to ask my mother to stop lending me money. (Giggles from a few participants) She is really nice and easy going. She wouldn't mind, because I would usually give it back to her on payday, and then slowly it was payday, and boom, 'Is that all you've got left' kind of thing."

It is clear from the discussions that all of the families were affected negatively in some manner. As noted above, many of the problem players reported - without details - that their family relations were non-existent. Others claimed to have borrowed extensively from their families and had not paid some of these debts back. One person had to move in with a sibling who was attempting to reorganize their finances. This individual had not

stopped playing video lottery, but had told the family they had. Another stated his video lottery play had led to divorce. We speculate from the lack of conversation in this area that it was a distressing topic that most participants did not want to consider. Since they openly discussed other aspects of their lives, we might infer that their video gambling has caused much grief for their families.

#### **4.3.6 Perceived Negative Impacts for the Community**

##### **• Non-VLT Players**

We observed a distinct difference between non-VLT players in the urban and rural settings with regard to perceived adverse effects on the community. When discussing casual players, participants in the urban group could not think of any harmful effects for the community. When problem players were discussed, a few people thought that the government would be forced to pay for problem players who had become destitute but this was countered by others who claimed the revenue from the machines more than made up for it. One individual felt that it depended on the size of the community. They contended that small communities rely on volunteers to survive and a problem VLT player cannot contribute in this way. One other person considered the possibility that crime might increase, since VLT players searching for money would turn to criminal activities. Finally, after we prompted the participants, they agreed that food banks would be negatively affected since people who might normally provide food would be there to collect it. In short, most participants in the urban group did not think there were any severe damaging effects on the community from problem video lottery gambling. We found the opposite in the rural group, although only one participant had observed any negative impacts.

The participants in the rural group first thought of problem players and/or their families going on social assistance, which would be a strain on the local economy. They also considered the costs of counselling problem players to get them to abstain from video gambling. They felt that problem video lottery players would be less productive at work and would eventually lose their jobs. Some may have to declare bankruptcy. A few participants stated that there would be more stress placed on food banks because the problem players would spend all of their grocery money and then go to the food bank. Finally, this group regarded increased crime as a possible result of problem VLT play.

##### **• VLT Players**

Non-problem players were consistent across both the urban and rural groups when detailing potential harm for their communities. To begin with, neither group could think of anything they had done as video lottery players that could be considered damaging to the community. However, they did feel that problem players had a negative impact in several ways. Both groups immediately thought that problem players would lead to a strain on food banks. Several participants said they knew of examples where this had occurred.

A second deleterious effect was thought to be for businesses. Most participants across the groups felt that problem players would not be good employees and that this would hurt

any business that employed them. They maintained that they would not be as productive because their minds would not be on their jobs; they would be constantly thinking of playing video lottery. In addition, if a person declared bankruptcy it hurt the community because monies would be owed that would not be forthcoming and this could cause businesses to suffer in a secondary manner. One person in the group claimed to know of an individual who had declared personal bankruptcy as a direct result of playing VLTs.

Lastly, the rural non-problem players felt that problematic VLT play would lead to increased crime and this would in turn lead to unsafe neighbourhoods. Again, just one participant in the rural group claimed to know of crimes that had been committed to provide monies for VLT play.

The problem players did not reference any problems they might be causing for the community. Although most noted they were not as productive as they might be at work and that they were often late or missed work, the participants did not appear to view this as a major problem. As reported above, one person openly stated they had defrauded a bank, but this, too, did not appear to be viewed by the urban group as overly deviant behaviour. Since many in both groups admitted spending their pay cheques along with any winnings they received, and several were months behind in all of their bills, it is reasonable to assume that at least some of these individuals are using community resources and/or are involved in illegal activities. Still, we must infer this, since we did not, for the most part, observe it in the groups.

#### **4.4 Impacts of a VLT Ban**

All of the participants were asked whether they thought video lottery should be removed from the province, or whether it should be up to each individual to decide whether or not to play VLTs.

The non-VLT players were split across both the urban and rural groups, with half wishing to see VLTs removed and half saying it should be left to the individual. Those who felt VLTs should not be removed referred to personal choice and responsibility. They also generally argued that if one harmful activity is to be removed, all other activities of a similar nature ought to be called into question. Those in favour of abolition questioned the value of the revenues gained when placed against the lives being ruined:

**Non-VLT Players (Choice):** (M) "I think there should be the choice. Otherwise, they'd have to do away with cigarettes, alcohol, computers, and anything else that could be addictive. They shouldn't pick on just one." (F) I think it should be left up to the individual. Now, if I had someone in my family who had a serious problem, losing everything, I may feel differently. (Another F) What if you did though? Even if you had a friend or family member that has a problem. Why can you not see past that and recognize that we all have personal choices and are responsible for our own actions. (M) "By removing VLTs are you going to stop the addicted gambler from gambling?" (Another F) "No, because they're going to get scratch tickets or go to bingo."

**Non-VLT Players (Abolition):** (F) "I think they should be taken out, because I think the only ones who would lose out are the government. We're the government and if we can't pay the extra in taxes or whatever, rather than ruining the lives of those people. Of course, I feel the same way about alcoholics, so if you're going to do one, you're going to have to do both." (M) "If the person is there for pleasure, they can generally find pleasure in other things too, because they are average normal people, who are thinking properly. Whereas the other, they can't think any different, and probably won't go anywhere else, but at least they won't go gambling."

All of the non-problem players, urban and rural, considered video lottery to be a matter of personal choice:

**Non-Problem Players (Choice):** (M) "Well, I'm nineteen years old, I'm an adult, and I have responsibilities. I have a wife, I have kids, a job, bills, and finances that I'm responsible for. If I want to choose to throw 5 'loonies' or even 25 'loonies' into a particular machine, that's my choice. That's because I'm responsible and I'm old enough to make my own decisions." (Another M) "I just don't see the distinction between VLTs, or bingo, or lottery tickets or whatever. If you get rid of one, then you've got to get rid of all of them. They say [VLTs] are bad, but they will still keep the other things."

Finally, the urban group of problem players was equally divided, and six of the nine people in the rural group would like to see VLTs made illegal:



**Problem Players (Choice):** (F) "I see a lot of people that go down there and do have fun. They can control it and can have fun with it. It's just the ones who can't, have to stay away. I think they should keep them."  
(Another F) "It wouldn't be fair for people who don't have problems not to be able to play just because I'm addicted." (M) "They shouldn't be [banned] because they'd be wasting their time. You're just going to find [the VLTs] somewhere."

**Problem Players (Abolition):** (M) "See they banned them in stores, and a lot of store owners lost a lot. But what were they doing before they got the machines in there anyway? I figure if they can ban them in stores, you can't say they can't ban them anywhere else. If they want to dump them, they can do it." (F) "I know it's kind of selfish to say that they should be banned, but that is the only way I think I can stop." (M) "Some people are going hungry too, I've seen that." (F) "Borrowing money and not being able to pay it back." (Another F) "The addiction leads to all that. The people who are addicted might as well burn their pocket book." (F) "So we can have more money." (M) "So we can have more money for ourselves." (Another F) "Exactly. You think you can just go out and stop gambling, but you can't. It's an addiction. It's just like drinking or smoking. You can't. It's hard." (Another F) "If they took them away, we wouldn't have the addiction."

We asked each group, regardless of their stance on the issue, what reasons they would have for leaving video lottery in place. The most widespread reason across the groups for keeping VLTs in the province was that people have to be responsible for their actions. This argument was mostly made by people who were pro-choice but a few people who wished to see VLTs banned also agreed with this premise.

Still, there were many participants who felt that there would inevitably be some people who could not, for one reason or another, control their video lottery play. Two arguments against this line of reasoning arose from the groups. First, the people who can control their VLT play should not suffer the consequences of those who cannot. Second, a case put forward in every group was that if VLTs were to be banned, then other addictive activities would or should also be banned. Another argument against banning VLTs in the province was that the machines would never actually leave the province, but would remain in illegal sites where problem players would seek them out. Most of the problem players admitted that if there were illegal machines, they would find them and patronize them. A few participants across the groups voiced concern that bars and other licensed establishments would be forced into bankruptcy by a ban. This latter argument did not impress most of the participants, regardless of their stance. They felt that if the licensed

establishments cannot survive without video lottery, they probably should not be in business in the first place. Finally, there was an underlying issue in all of the groups that if VLTs are banned, the government will simply bring in some other activity to replace it.

We also asked all the participants, regardless of their stance on the issue, what reasons we would have for removing VLTs from the province and making them illegal. Almost all stated that a major reason to remove VLTs would be the adverse effects they cause for problem players and their families:

(M-Non Problem Player) "Well, people get addicted, lose all of their money, and their families are going without. That would be a reason [to ban VLTs]." (F-Non-VLT) "A burden on the children." (M-Non-VLT) "A burden on the whole family, not just the gambler."

However, few of the participants felt this alone would be a sufficient reason to abolish video lottery. A second argument given for removing VLTs was that even if illegal VLTs take their place, access would be restricted to the people who happened to know about them. This was seen by several participants as a sufficient reason to ban them. Most did not argue with the premise that if the machines were illegal, minors and others who have not yet tried video lottery will have less chance of developing problems with this form of gambling.

Problem players who wanted VLTs removed thought it was the only way they could gain control of their problem. Other problem players argued with these advocates of a ban, stating that they would turn to different forms of gambling, such as bingo, scratch tickets, and card games. Several problem players agreed but felt that they would never be able to spend the same amount of money on these other activities as they have with video lottery.

We further probed in the groups of video lottery players what they would do if VLTs were removed and made illegal. Many of the non-problem players said they would miss playing the machines. However, they all agreed that video lottery is not an important aspect of their social lives and they would find something else to do with their time.

Although roughly two-thirds of the problem players claimed that removal of VLTs would be the solution to their problems, we observed that most would search out illegal machines if they became available. In addition, most of the problem players felt they would travel to First Nation Reserves, if the reserves continued to have VLTs:

**Problem Players:** (F) "Some people would probably still have them."  
 (Another F) "We'd find them somehow." (Laughter from group) (F) "If I knew that they were in a corner store, I would go there, illegal or not."  
 (M) "For me, I'd still be playing the machines if they were illegal." (Some agree). (F) "You'd find a place." (Another F) As soon as you find a place, you'll know where it's at, you're gone." (F) "If it were me, it wouldn't affect me at all because I go to the Indian reserve to play." Moderator to group: If you were near a reserve where the machines were still accessible would you go? (F) "The Indian's are going to love us is all I can say." (Most agree). (F) "They'd certainly learn to love us."

All of the participants across the groups felt there were other activities, gambling and leisure, that could lead to the same negative consequences as video lottery. Most immediately mentioned illicit drugs and/or alcoholism. A few people in every group thought that bingo for some people is just as problematic as video lottery. Several others thought of casino gambling and high stakes card games. One participant who had a problem controlling their video lottery play was also obsessed with another leisure activity. They claimed the activity was very expensive and time consuming, although nowhere near their problems with video lottery. Finally, one group thought that losing one's job could lead to debt, disruption of the family, separation/divorce, and loss of significant investments. Nevertheless, the observation that other activities could lead to problems did not minimize the perceived negative impacts associated with video lottery.

The evidence suggests that a ban on video lottery terminals would not help many people who have already developed problems with them. These people will turn to other forms of gambling and/or seek out illegal VLTs or machines on reserves. However, even if illegal VLTs are restored and VLTs remain on First Nations Reserves, elimination of legal VLTs would reduce access to those people who have not played video lottery and would be at risk for developing problems.

#### 4.5 Altering VLT Characteristics and Other Options

We briefly addressed VLT machine characteristics and other aspects of VLT play thought to lead to problematic play.

One characteristic that apparently leads many problem players to overspend is the "bonus" play. Almost all of the problem players reported "chasing" the bonus credits on a VLT:

**Problem Players:** (M) "Or if you get a high bonus, you'll chase that. Like you'll have a fifty bonus and you'll put in a hundred to get it." **Moderator:** Y, you're saying that's the worst? The bonus, what happens there? (F) Well, you just won't leave that machine until you get that bonus. You know that bonus is going to go! (Emphasis theirs) You put more in getting it than it's actually worth. (Another M) If the bonus is up to 1000 or 1,500, you're not going to leave that for someone else to get it. So you're going to sit there and drain your wallet trying to get it." (F) If I'm playing and the bonus is high, and it's closing time, I'll be there first thing when [the place] opens." **Moderator:** So you're coming back the next day are you. (Most agree).

"Bonus Chasing," as it is referred to by the problem players, begins with the perception that bonuses promise a large sum of money. After placing a significant amount of money into the machine, they think that winning the bonus will leave them "ahead." Once they have placed more money in the machine than the bonus is worth, they believe that if they can win the bonus they will cut their losses. Finally, they do not care about anything except winning the bonus. Most problem players claimed to have "emptied their wallets" while chasing a bonus. Several stated they had missed work because they had not obtained the bonus when the establishment closed and returned the next day instead of going to work. Non-problem players claimed to have frequently observed this behaviour and, occasionally, engaged in it.

Another aspect of the bonus on which many of the VLT players commented was that if a machine had a high bonus, it was more likely to pay out. Most of the players held the incorrect belief that when someone wins the bonus it eliminates the possibility to win on that machine for some time. Thus, many casual and problem players would search out machines with a high bonus left on it. The discussion suggests that the bonus play is a potentially harmful feature of play that leads to overspending among some non-problem and most problem players.

We probed other features, such as the "stop button," and the lights and sounds of the machines. Players reported using the stop button to speed up the game. This did not appear to be done to increase excitement in the game but more to speed up the outcome. None of the players believed they could influence the outcome of a game by using the stop button. Still, removing the stop button would lead to longer periods between "rolls" on line games and would, thereby, slow down the rate of losses. The lights and sounds of the "bells" were a significant factor for a few problem players, who reported intense excitement when they got the "bells." However, this was clearly not the case for all of the problem players.

The problem players made a few suggestions they felt might help people who are having difficulties controlling their play. The first was to limit hours of operation for machines. Many problem players felt this would keep them from playing night and day. The second

suggestion was to include a pause mechanism in the game that would inform the player of their expenditure and time spent playing, and ask them if they wanted to cash out. This would allow the player time to think about what they are doing. Our observation of the problem players suggests their response would be contingent on their perception of whether they were going to win or not. Nevertheless, all of the players felt this would be a good mechanism to help people keep track of their time and expenditures.

Finally, we prompted non-problem and problem players with a suggestion that VLTs might be restricted to several regions in the province, thereby reducing access. This idea was rejected across the groups as ineffective. Some also felt it could lead to problems such as drinking and driving.

#### 4.6 Knowledge and Education

We observed across the groups a lack of awareness of the percentage of people who experience problems with video lottery gambling. In general, knowledge about problem gambling was inadequate. For instance, few participants knew any of the signs of problem gambling. Moreover, when queried, most people thought that between 30 and 80 per cent of video lottery players were "addicts." When we informed the participants of the Focal evidence that between 13 and 19 per cent of regular players were problem players, most were surprised but it did not alter their perceptions.

Two participants felt Nova Scotians' require education such that people can make informed decisions as to whether to engage in an activity or not:

(F Non-VLT) "I'm not saying education in the sense of going to school or lecturing or teaching someone, but education in terms of being aware. Like, how do you play this, like being aware of the pitfalls, being aware of the advantages." (Emphasis hers). "Like you'd think that if you were more aware, you'd make a more informed decision about how you would treat that particular item." (Emphasis Ours). (M Non-Problem Player) "I think where the government is playing a heavy role, I think they should take some of the monies and devote it to better education and more responsibility. I think what they need to concentrate on is producing more responsible gamblers, if I could use that term. Right now they counsel people once they have a problem. They need more in place to educate people before they develop a problem. More of a preventive program."

Others claimed, however, that education would not prevent people from developing problems with their video lottery gambling:

(F Non-VLT player) "No, I don't think education would help to deter a leisure player from becoming an addict. They've educated people about HIV. They should educate them to this extent that if they are an addict and they want help, and I think then you should take them in hand and try to help them with courses and that."

Three problem players have taken initial steps toward obtaining help, such as calling Gamblers Anonymous and Drug Dependency Services. They did not follow up and it was unclear what kept them from continuing. However, an ongoing theme with the problem players was that *they* had to quit and no one was going to be able to help them. This misperception may be one reason why the majority of the problem players have not, as yet, sought help.

#### 4.7 Conclusions

While speculation, the length of time does not appear to play a major role in whether an individual will develop a problem with video gambling or not. We observed a wide variation in duration of play within the problem and non-problem groups. For example, some problem players had been playing for a year and others had been playing before legalization of VLTs in Nova Scotia. Conversely, there were people in the non-problem groups who had been playing VLTs for many years and were not, as yet, displaying signs of problematic gambling behaviour.

VLT problem and non-problem players differ first and foremost in their reasons for playing. Leisure players played for a variety of reasons. They rarely made a special trip to play video lottery. Problem players were the complete opposite. They went specifically to play VLTs, and they played to win. It is informative that the non-problem players claimed not to hold high expectations of winning large sums of money. If they did, it was an added bonus. Problem players continuously spoke of playing to win but they did not seem to care about winning money. Although their conversation revolved around winning money, they nonetheless routinely played their winnings until their money was gone. We assume that if winning money is actually important, they would take their winnings and leave.

We also observed that roughly one-quarter of the problem players had been through a significant life event before becoming involved in video lottery. This included retirement, serious debilitating accidents, break-ups with partners, and loss of a job. These people claimed this was the main reason they started playing video lottery and people who undergo serious life changes may be more at risk for developing problems.

Another difference noted between non-problem and problem players was that the former had been involved in social activities before starting to play video lottery. This was contrasted by solitary activities the problem players engaged in before playing VLTs. All

of the participants had gambled at various activities, which included on-line and instant lottery tickets, card games with friends, bingo, and raffles. The differences among the three groups included the frequency of gambling and level of wagers, with the highest frequency and wagers noted among problem VLT gamblers. Another important difference was that many of the problem players have organized their lives around their video lottery play, whereas other participants have more diverse interests and activities. Video lottery is simply an "add-on" for non-problem players.

The consensus across all of the groups was that there are no distinguishing demographic characteristics separating non-problem players from problem players. All of the participants thought that anyone could become a problem player. Some felt individual weakness leads people to develop problems, some considered the tendency hereditary, a few participants thought there is an 'addictive personality,' and one participant considered it to be cultural in that education about responsible gambling is lacking. The fact that people do not perceive demographic differences between non-problem and problem video lottery players is important, particularly since the Video Lottery Players Study conducted by Focal Research Consultants found demographic differences. While level of education and other demographic factors would not be observable, this still points to a lack of knowledge among the population about problem video gambling.

Turning to the perceived positive impacts, we observed across the groups that benefits from playing VLTs were considered to exist almost solely for non-problem players. For the individual, these included recreation, excitement, a way to pass time and/or get out of the house, and a method of socializing for some people. Individuals who had never played VLTs were more positive about familial impacts. They cited stress relief from daily pressures, a pastime, and shared winnings for the family unit. The non-problem players considered winnings that could be shared with the family, and a few participants claimed that some couples play together as a social outing.

Problem players could not think of any positive impacts for their families, with the odd exception of possible shared winnings. However, since most claimed to spend their winnings on VLTs, we do not feel this is a plausible benefit. All of the participants felt that video lottery had a positive impact on their community through direct revenues to licensed establishments and/or revenues to the government. Some participants felt this benefit was quickly eroded by having to pay for the negative social impacts of problem players. Others felt the money would be spent elsewhere, if not on video lottery, so the government would obtain revenue regardless.

Whereas benefits were considered for leisure players, the participants mostly thought of negative consequences for problem VLT players. Many of those who do not play video lottery thought that all VLT players are at risk of becoming addicted, that the activity is a waste of time, and that many leisure players spend more time or money than they should. However, these groups were divided on these points, with others arguing that there are numerous addictive activities and that it is up to each individual to choose how they want to spend their time. Non-problem players did not see any harm in their VLT play despite

the fact that they had all occasionally overspent time and/or money. A few of these participants also cited the possibility of addiction as a real threat.

Both non-players and non-problem players thought that VLT players with problems would eventually lose everything: car, house, job, family, friends, self-esteem, and respect in the community. They felt that problem players would develop health problems because of difficulty sleeping, improper eating habits, and depression.

In fact, although the difficulties faced by the problem players were severe, they were not as extreme as the other participants predicted. The problem players had all expended huge sums of money in video lottery play. From their self reports, three of nineteen appeared to be on the brink of financial disaster. The remaining 16 were all at various points of financial duress. Almost all reported borrowing money and not paying it back, lying, and "scamming" to obtain funds for play. Many had exhausted their family relations, and two people were separated or divorced. Several problem players described humiliation while playing and severe bouts of depression.

All of the problem players openly admitted that they could not stop playing video lottery, and several included other forms of gambling, like scratch tickets and bingo, in with VLTs. The problem players did not elaborate as to any effects they may be having on their communities. We would infer that in light of their financial difficulties, at least some of these individuals have used community resources, such as food banks, at some point. However, we have no direct evidence of this from the discussions. One individual, we have noted, defrauded a bank to obtain money to play VLTs.

The majority of the problem players, nevertheless, claimed to be employed or on fixed incomes, and somehow managing their resources and VLT play. Nonetheless, it is clear from our discussions that unless these people seek help and contain their VLT and, in some cases, other gambling, they will reach a period of crisis, where they will become a burden on the social system.

All of the participants, when prompted, felt other activities could be just as damaging to an individual, their family, and community, as video lottery gambling. The two activities mentioned most often were illicit drugs and alcoholism. A few participants discussed leisure activities, and one group concluded that losing one's job could lead to similar impacts. Nevertheless, the idea that other activities exist that could be as harmful did not alter the groups' perceptions of the negative impacts of video lottery gambling.

We presented each group with the question of whether they personally would like to see VLTs removed from Nova Scotia, or whether they thought VLTs should remain in the province. The people who do not play video lottery were divided over the issue, as were the problem players. The non-problem players felt that individuals should be allowed to choose.



Several arguments were put forward for abolishing video lottery. The non-players who want the machines removed felt it is an addictive form of gambling that imposes undue hardship on the families of the addicted. Several also thought that the government did not need the revenue badly enough to inflict serious misery on a segment of the population. Many participants felt it would also reduce the burden video lottery is perceived to be placing on the social system. Lastly, about half of the problem players wanted to see VLTs removed because they could not see any other way of restraining themselves. By removing VLTs, the government would help them to deal with their problem.

Reasons were also raised as to why video lottery should not be prohibited. The most vocal opposition to prohibiting VLTs was based on personal choice and personal responsibility. Most participants who felt this way claimed that if video lottery is banned, the government will have to ban many other harmful activities. Furthermore, VLTs should not be kept from leisure players who gamble responsibly simply because there are those who do not. Closely tied to this was the notion that people have to be responsible for their actions, whether they can control themselves or not. Many participants across the groups further asserted that VLTs will never disappear. They will just move underground as illegal machines where problem players will find them and continue to play. The majority of the problem players acknowledged that they would seek out illegal machines, and/or would visit First Nations Reservations to play them.

Sgt. Ken Brown of the RCMP, who was interviewed for this study, expressed several concerns with First Nations gambling operations. He noted, for example, that VLTs are allowed in reserve gas bars and similar retail operations from which they have been banned in the rest of Nova Scotia. There may also be no restrictions on hours of operation. Furthermore, regulation is administered by Band gaming commissions that may own the machines and, therefore, be in a conflict of interest.<sup>62</sup>

The one argument for prohibition that few people across the groups tried to counter was that making VLTs illegal would reduce access to minors and others who have yet to try the machines. Therefore, while it might not help the people who already have problems, many people believe it would prevent the problem from increasing dramatically. Notwithstanding this belief, there is no conclusive evidence that making VLTs illegal will stop people from playing them or beginning to play them. Taking hallucinogenic drugs for non-medicinal purposes, for example, has generally been illegal but there is no doubt that many individuals - young people as well as adults - are able to buy and consume such drugs. High profits associated with illegal supply encourage a black market served by numerous vendors. Many customers, of course, develop addictions and an extensive, government-supported rehabilitation system has evolved to help them.

Finally, we probed the players for machine characteristics that they felt contributed to problem play, and it was concluded by almost all of the players that the "bonus" credits

62

*Pers comm., Sgt. K. Brown.*

led to chasing. This occurred occasionally with non-problem players but appeared to be routine with problem players. When the bonus credits hit a certain level, players would start to play for the bonus. Most problem players stated they often put more money in than the bonus was actually worth, simply because they did not want other players to win it after they had left the machine.

Suggestions from the players as to altering the characteristics of the machines were to limit the hours during which VLTs could be played. They also felt that a "pause mechanism" that would tell players how much time and money they had expended and let them cash out or continue might provide a wake-up call. In our observation, whether or not they would stop playing at this point would likely be based on their perceptions of whether or not they were poised to win.

## 5.0 ECONOMIC IMPACTS OF VLT USE

The first step to measuring the incremental economic and government revenue impacts of VLT use in Nova Scotia is to understand the dimensions of play. VLT play stood at \$404.7 million in fiscal 1998, up 8.1 per cent from 1997 and 8.2 per cent from 1996 to 1997.<sup>41</sup> These growth rates were about three times that of the Provincial economy as a whole. Table 5-1 provides a breakdown of the disposition of VLT revenue for fiscal 1998 and 1997.

**TABLE 5-1: VLT Wager, Activity Comparison, Fiscal 1998 and 1997**  
(\$'000,000s)

	1998	% of VLT Player Expend- itures	1997	% of VLT Player Expend- itures	Change in Value (1997- 1998)
Operating Expenses	\$9.4	7.8	\$7.5	7.1	24.9%
Revenue to Retailers	\$31.3	25.9	\$29.7	28.0	5.5%
Revenue to Province	\$80.4	66.4	\$69.0	65.0	16.5%
<i>Net VLT Player Expenditures</i>	<i>\$121.0</i>	<i>100.0</i>	<i>\$106.2</i>	<i>100.0</i>	<i>13.9%</i>
Prizes Paid to VLT Players	\$283.8		\$268.4		5.8%
<b>Total VLT Wagers</b>	<b>\$404.7</b>		<b>\$374.5</b>		<b>8.1%</b>

Sources: NSAGA, *Annual Gaming Report 1997-1998* and Porter Dillon Limited

As the table shows, net expenditures by VLT players grew impressively over the year. The 13.9 per cent increase exceeds the 3 per cent growth in Nova Scotia GDP over the same period by more than four times. Resulting revenue to the Province grew at more than five times the rate of the overall economy. Over two-thirds of net player expenditures accrue to the Province as revenue.

A key factor in assessing the impact of any economic activity on the provincial economy is the breakdown of expenditures between Nova Scotia residents and non-residents. The following groups of Nova Scotians made about \$116.9 million (96.6 per cent) of the \$121.0 million in VLT expenditures in Nova Scotia during 1998:

<sup>41</sup> NSAGA, *Annual Gaming Report 1997-1998*, pp. 23 and 25. See also, Table 2-3, above.

- 33 per cent of adult Nova Scotians who are casual players, making net expenditures of about \$3.5 million per year (\$15.50/year/person);
- 6 per cent of adult Nova Scotians (about 38,790 persons) who are regular players, making net expenditures of \$51.5 million/year (\$1.328/year/person), and
- about 1 per cent of adult Nova Scotians (6,400 persons) who fall into the problem player category, making net expenditures of about \$62.1 million/year (about \$9,700/year/person).<sup>64</sup>

The remaining 61 per cent of Nova Scotia adults do not play VLTs at all. It follows from this that \$4.1 million in expenditures were made by non-Nova Scotians (4.4 per cent of total VLT expenditures).

Our Focus Group research and the Focal Survey indicate that casual VLT play is not a destination activity. Casual VLT players do not seek VLT machines out nor do they select establishments for patronage based on the availability of VLTs. Therefore, we conclude that the majority of these expenditures would still be made in Nova Scotia. Based on our Focus Group inquiries with casual VLT players and the results of the Focal Research Survey, the \$4.1 million spent on VLT gaming by visitors to Nova Scotia would likely go to other forms of casual gaming such as scratch tickets, break-outs, or casino play, or to other leisure activities. We doubt that a large amount of the spending would be for lottery tickets as lotteries do not have the type of immediate response most likely to be desired by visitors to the province. We conclude, therefore, that VLTs are not a source of export revenue. Expenditures by non-residents in Nova Scotia would not likely decrease if VLTs were removed.

The balance of this chapter assesses the extent to which video lottery gaming produces gross and net economic and fiscal impacts in Nova Scotia. We also measure the extent to which the gross and net impacts would not occur if video lottery gaming was not available in the province.

## 5.1 Economic Impacts

Economic impacts are normally measured two ways for two different reasons. The first provides a measure of the gross economic impacts of an economic activity. It uses economic models, such as input-output systems, to measure in the interrelationships between spending in the economy and the extent to which the economy imports or exports

<sup>64</sup> Focal Research, 1997/98 *Nova Scotia Video Lottery Player's Survey*, October, 1998, pp. 2.4, 2.7, 2.8, 3.3. Problem players are a subset of regular players. Data on problem players are given on pp. XVIII XIX. The market penetration reported by the Focal Research study reflects the penetration achieved after a seven year capex of the population to VLTs. It is highly likely that once "lifetime" exposure levels are reached the market penetration for casual, regular and problem play will increase, with a corresponding drop in the percentage that have never played.

goods and services.<sup>65</sup> This approach to impact measurement is used primarily for economic planning. It is not concerned whether the impacts are new or incremental to the economy. The impact measures are used to determine what types of inputs will be required by the economic sectors so that plans can be put in place to make sure bottlenecks do not occur. The second impact measurement approach assesses only those impacts that would not have otherwise have occurred if a project or policy initiative were not undertaken. This form of impact analysis is the one that is properly used to measure the true expansionary effect of an economic activity on an economy.

The 1996-1997 NSAGA Annual Report states that:

While some individuals have argued that gaming represents a simple transfer of wealth with no other economic impacts, that view is not universal. For instance, the recent CANMAC Economics Ltd. study prepared for the Authority states that gaming activities in general have "the potential to generate economic wealth in Nova Scotia". Another CANMAC study commissioned by the Authority shows that VLT gaming generates almost 900 direct jobs at 569 terminal sites, and another 500 spin-off jobs elsewhere in the economy.<sup>66</sup>

The Annual Report goes on to say that:

Economic activity from VLT play has broadened the tax base to the extent that the [P]rovince earned an additional \$3 million of sales and income tax from the spin-off activity (in addition to the \$69 million of direct revenue already earned from VLTs).<sup>67</sup>

The statement in the Authority's Annual Report, however unintentionally, can lead the reader to assume that VLT job impacts are incremental impacts; that is, they would not occur in Nova Scotia if VLTs did not exist. This is not the case. The CANMAC studies

<sup>65</sup> An input-output system allows the analyst to trace the path of spending backward through the economy so that spin-off impacts can be estimated. For example, if a furniture manufacturing firm increases its sales, it will need to pay more staff and purchase more lumber to manufacture its products. In turn, lumber manufacturers will need to purchase more timber and possibly pay more staff or wages to produce the additional lumber required for the furniture. Again, in turn, timber producers will need to increase their output to supply the lumber manufacturers. Expansion may, furthermore, cause lumber manufacturers and timber producers to increase their expenditures for such necessities as, say, office furniture, which would have an impact on the demand for furniture produced in Nova Scotia and lead a subsequent round of expenditures in that sector. The rounds of inter-industry linkages continue on until all the demand is met and expenditures leak out of the province in the form of imports. Additional spin-off effects are created when the additional wages earned are spent by households.

<sup>66</sup> NSAGA, *Annual Gaming Report 1996-1997*, p. 26.

<sup>67</sup> *Ibid.*, p. 197.

do not present the economic impacts as incremental effects. Rather, they correctly determined the economic interactions that occur due to VLT expenditures.

Our research shows that while VLTs do support jobs and generate expenditure, not all of these jobs and expenditures would disappear in the absence VLT gaming. The reports cited by the Authority describe the results of economic impact analyses that account for the gross direct and spin-off effects of VLT expenditures. No attempt was intended or made by CANMAC to measure incremental impact effects. This statement is not meant to be critical of CANMAC work or NSAGA but merely to describe the scope and objectives of that particular study.

If the economists at CANMAC had been asked to measure the incremental effects of VLT gaming, they would have used an alternative impact estimation approach. The first step in measuring incremental economic impacts is to determine what type of expenditures would be made by those making VLT expenditures if VLTs were not available in the Province. Following, therefore, we examine the VLT expenditures of various categories of players and their alternative expenditure patterns, if legal VLTs are removed.

#### 5.1.1 Casual VLT Players

As noted above, casual VLT players who are Nova Scotia residents account for about \$3.5 million in net VLT expenditures. Our Focus Groups and the results of the Nova Scotia Video Lottery Players Survey by Focal indicate that VLT play is not a destination activity for this group. Before VLTs, casual players played bingos, casino slot machines, scratch and break out lotteries, and other lotteries. Their play at VLTs did not replace other leisure activities. VLT play is not a planned activity for this category of player. It is an *ad hoc* part of other social activities.

Nothing in our Focus Group research or the Focal Survey indicates that casual players will redirect their spending outside of Nova Scotia if VLTs cease to be available in the province. Hence, if VLTs are banned in Nova Scotia, there should be no direct leakage out of the province from casual VLT players. It is clear, however, that they would switch their \$3.5 million in net VLT expenditures to other forms of gambling and leisure, mostly other legal forms of gaming. There is no information in either our Focus Groups or the Focal Survey that would indicate casual players would switch their activity to VLT sites at First Nation Reserves or to illegal VLT activities.

In economic terms, the spin-off effects from spending on other gaming or leisure activities would likely be similar to those of VLT play, with the exception of the amount of revenue that would be collected by the Provincial government. This impact reflects a change in the allocation of economic effects, not the total amount of the effect. Fiscal impact effects are described in Section 5.2, below.

#### \* Regular Non-problem VLT Players

Approximately 38,790 adults in Nova Scotia are regular non-problem VLT players. These players spend about \$111/month on VLTs, for a total of about \$51.5 million/year (fiscal

1998). Regular players, according to the Focal Survey engaged in, on average, 3.1 gaming activities per month. About three-quarters of their gaming budget is allocated to VLTs and the remainder is devoted to other forms of gaming.

The Focal Survey indicates that regular VLT players are more likely to play lotteries, scratch tickets, break opens, bingo, card games, Proline, sports pools, and so on, than non-VLT and casual VLT players. Likewise, our Focus Group research found that regular non-problem players engaged in a variety of gaming activities other than VLTs. There was no indication in either research that regular, non-problem, players would seek out VLT gaming activities in other provinces if VLTs were not available in Nova Scotia. Hence, we do not anticipate any import leakage if legal VLTs cease to exist in Nova Scotia.

We conclude that in the absence of VLTs virtually all of the \$51.5 million spent by non-problem players would remain in Nova Scotia. It is most likely that the expenditures would be diverted to other legal gaming activities. However, we also note that some of these expenditures would occur at VLT sites at First Nation Reserves. However, from a total economic perspective, the spin-off in terms of jobs and household income would likely be the same.

#### • Regular Problem VLT Players

The 6,400 Nova Scotia adults who play VLTs are considered problem players make net expenditures of approximately \$62.1 million per year (fiscal 1998) on VLTs. The average player in this category spends a little more than \$800 per month at VLT gaming.

Our Focus Groups results suggest that problem VLT players will respond differently than non-problem players if VLTs are removed. Problem players see VLT gambling as a destination activity. In the absence of VLTs they will gamble at casinos, on VLTs at First Nations Reserves, or at illegal VLT sites. They will also, of course, pursue other legal gaming activities. There was no sign in any of our research, however, that problem VLT players would replace their gambling in Nova Scotia with trips out-of-province for VLT play or other forms of gaming. The exception to this situation would be points in the province where VLT problem gamblers have easy access to out-of-province VLT machines. This condition primarily prevails in Cumberland County next to the New Brunswick border, although it could also be a factor in counties with ferry routes out of the province (Yarmouth, Pictou, and Cape Breton Regional Municipality).

In terms of purely economic impacts, removal of VLT machines would have limited effects even with respect to the activities of problem players. Their spending would remain in the province and would likely be directed to other gaming activities, legal or illegal. Even if spending were on illegal activities, this spending will have an economic impact, although it will not be immediately recorded in the mainstream economy. If there is significant illegal activity, of course, the fiscal situation of the Province will be affected, as it cannot tax illegal gaming activities.

### 5.1.2 Non-resident VLT Play

We have calculated above that non-resident VLT expenditures were approximately \$4.1 million in fiscal 1998. VLT play by these individuals was casual. Data indicate that casual VLT play is not a destination activity. It is extremely unlikely that if VLTs were not available in Nova Scotia this \$4.1 million would not have otherwise been spent on other gaming or leisure activities in the province. To the extent that these other gaming or leisure activities have economic interrelationships similar to VLT gaming, the overall economic impact of non-resident expenditures will remain the same.

### 5.1.3 Conclusions

The addition of VLTs to the Nova Scotia gambling mix has not had any appreciable impact on the extent to which Nova Scotians are engaged in gaming outside of the province, nor has it caused expenditures by non-residents to increase in the province. For casual VLT players the availability of VLT machines has not likely increased their gaming activity but merely spread their activity to more types of gambling. Hence, we conclude that there are virtually no incremental economic impacts created by VLT use with respect to the casual VLT player.

There are virtually no indications that regular non-problem VLT players would spend their VLT gambling budget outside the province. Rather, they are most likely to redirect their VLT gambling budget to other legal forms of gambling or other leisure activities in Nova Scotia. Again, because the linkages to the provincial economy of these other forms of gambling and leisure activities are similar to those of VLT machines, there will be little change in the overall economic impact on the economy.

Regular problem VLT players will continue to gamble and will not likely redirect their expenditures to other forms of leisure besides gambling. This group of players will likely seek out VLTs at First Nation Reserves, will use other forms of gaming, and will likely willingly engage in illegal VLT play. Problem players who live near border points with access to VLT machines will likely switch some of their gambling activity to out-of-province locations. With the data available from our Focus Groups and the Focal Survey we are not able to estimate the extent to which problem players will seek out locations in other provinces. We are not, therefore, able to estimate the leakage of expenditures from Nova Scotia.

We do not anticipate that this leakage will be large, however, as the majority of the Nova Scotia population is substantially removed from border points. If the VLT expenditure leakage to other provinces is large, it will reduce spending inside Nova Scotia. The extent to which legal VLT machines keep VLT spending by problem players in Nova Scotia does provide some net economic impact to Nova Scotia.

The data provided by the Focal Survey and the current Annual Gaming Report clearly show that VLT play by non-residents is a minor activity. Moreover, the casual play of non-residents would in all likelihood be replaced by spending on other gaming or leisure



activities in the province. The change in the economic impact due to this change in spending patterns would be minimal at best.

To remain consistent with the work already completed for the Authority, we derive our economic impact from the information provided in the CANMAC Economics economic impact report presented in the 1996-1997 Annual Gaming Report, and Table 5-2, which provides an overview of the total provincial gaming wager.

**TABLE 5-2: Provincial Gaming Wager, Activity Comparison, Fiscal 1998 (\$millions)**

	VLT + Other	VLT	% of Net VLT Wager Revenue	Other	% of Net Other Wager Revenue
Operating Expenses	\$104.4	\$9.4	7.8	\$261.0	72.7
Revenue to Charities	\$18.6			\$18.6	5.2
Revenue to Commercial Entities	\$20.5			\$20.5	5.7
Revenue to Retailers	\$31.3	\$31.3	25.8		
Revenue to Province	\$139.2	\$80.4	66.4	\$58.8	16.4
Net Wager Revenue	\$314.0	\$121.1		\$358.9	
Prizes Paid	\$626.2	\$283.8		\$342.4	
<b>TOTALS</b>	<b>\$940.2</b>	<b>\$404.9</b>		<b>\$535.3</b>	

Source: NSAGA, *Annual Gaming Report 1997-1998*, Items 2.4 and 2.6, and Porter Dillon Limited

The CANMAC analysis shows that on \$105.7 million in net VLT expenditures in 1997, household income impacts are as follows:

- direct, \$22.8 million;
- indirect, \$2.2 million (based on \$11.3 million of indirect expenditures for Atlantic Lottery Corporation services); and
- induced, \$10.9 million (based on the responding of the direct and indirect household income).

The total household income impact on \$105.7 million in net VLT expenditures in 1997 was calculated at \$35.9 million by CANMAC. The implied VLT total household income

multiplier, therefore, is 0.34 (i.e., \$35.9 million/\$105.7 million). In other words, each dollar of net VLT revenue results in 34¢ of total household income.

Our parallel impact analysis is based on the diversion of \$121.1 million in 1998 net VLT expenditures to other forms of gaming and leisure activity. Based on Table 5-2, above, and the CANMAC impact results, our calculations of the impacts if VLT expenditures are diverted as we expect are as follows:

- direct household income will be proportionately lower at about \$6.9 million (revenue to commercial entities);
- indirect household income will be proportionately higher at \$18.6 million (based on indirect expenditures of \$94.4 million for operating expenses and the expenditures by charities of their revenues); and
- induced household income will remain proportionately the same at about \$11.1 million (based on the responding of direct and indirect household income).

This totals to \$36.6 million in total household income to Nova Scotians applying the same modelling techniques as CANMAC.

However, as discussed further in Section 5.4.2, below, about \$88.0 million in off-reserve net VLT revenue could potentially move to First Nations sites, in the event of a VLT ban. Current limits on the number of First Nations VLTs would restrict the ability of these sites to absorb diverted VLT activity to about \$20.7 million. As a result, we would expect that \$100.4 million (\$121.1 million - \$20.7 million) would remain to be diverted to other gaming and leisure activities resulting in \$30.3 million in household income. The \$20.7 million in net revenue diverted to First Nations reserves would generate a further \$7.0 million in household income, for a total Nova Scotia household income effect of \$37.3 million. Under these circumstances, we estimate:

- a \$3.9 million (\$41.2 million<sup>60</sup> - \$37.3 million) reduction in Nova Scotia household income and
- approximately 150 fewer full-time equivalent jobs (based on a full-time equivalent job valued at \$26,000<sup>61</sup>).

While we recognize that gaming in general can expand the Nova Scotia economy, this expansion will only occur if gaming prevents the outflow of expenditures by Nova Scotia residents or incrementally increases the inflow of expenditures by non-residents. This may be the case for casinos or other destination gaming activities. The results of the Focal

<sup>60</sup> \$121.1 million x 0.34 (the implied VLT total household income multiplier) = \$41.2 million.

<sup>61</sup> CANMAC Economics, "Nova Scotia VLTs: An Economic Impact Statement," p. 3, \$35.89 million/1,381.8 full time equivalent jobs = \$25,973 [1997 dollars], rounded to \$26,000 to allow for near zero inflation.

Survey and our Focus Groups as well as other studies clearly show, however, that the VLT gaming is a form of "convenience gambling." It is rarely a destination activity and provides negligible import replacement for expenditures by Nova Scotia residents that would otherwise have flowed out of the province. This is why the incremental impacts associated with \$121.1 million in net VLT revenue may appear to be relatively small.

## 5.2 Fiscal Impacts of VLT Gaming

While there is virtually no evidence that VLTs bring new economic activity to Nova Scotia, VLTs are extremely effective instruments to allocate financial resources between the private and public sectors of the economy. As Table 5-2, above, shows more than 66 cents of every dollar of net wager revenue from VLTs accrues to the Province as revenue. On the other hand, only 16¢ of each net wager dollar from all other forms of gaming accrues to the Province as revenue. VLTs, in other words, are the most efficient of all gaming activities in raising revenue for the Provincial treasury.

In terms of total sales, 18.4 per cent of VLT sales accrue to the Province as revenue compared to about 5.5 per cent for personal income (income taxes as a percentage of total personal income) and 10.8 per cent for retail sales (as a percentage of total retail sales).<sup>70</sup> Based on these two comparisons, VLTs are also extremely efficient Provincial government revenue generators relative to traditional sources of revenue.

The fact that the growth rate of VLT expenditures far exceeds the rate of growth in the overall Provincial economy, combined with the relatively high tax take from VLT sales, suggests that the propensity to play VLTs is highly inelastic with respect to price. That is, even though the relative price of playing VLTs, compared to other gaming activities, is kept high by a large Provincial government revenue share, play on the machines continues to grow at a rapid rate. This is indicative of the strong commitment to VLT play among regular players, if not addiction in the case of problem players.

### 5.2.1 Regressiveness of the VLT Tax

Some critics of VLTs argue that the large Provincial revenue generation from VLTs is in effect a regressive tax because the majority of the revenue is paid by the lower income segments of Nova Scotia society. In fact, Focal's Video Lottery Players Survey found that among casual players:

- 18 per cent had low household incomes (compared to 27 per cent in the population);
- 36 per cent medium level household incomes (compared to 35 per cent in the population); and

<sup>70</sup> CANMAC Economics, "Nova Scotia Gaming Industry Overview," in NSAGA, *Annual Gaming Report, 1996-1997*, Appendix B, p. 6. The proportion of VLT sales accruing to the Province was calculated based on 1997 data presented on p. 25 of the same Annual Report. In 1998 the percentage of VLT sales accruing to the Province was 19.9 per cent. See NSAGA, *Annual Gaming Report 1997-1998*, p. 23.

- 46 per cent had high household incomes (compared to 38 per cent in the population).<sup>71</sup>

Regular players have an income profile that is also very similar to the general Nova Scotia population:

- 27 per cent were from low income households;
- 43 per cent were from medium level income households; and
- 30 per cent were from high income households.<sup>72</sup>

Data are, unfortunately, not available to describe the household income profile of the 1 per cent of Nova Scotian adults who are considered problem VLT players. The findings for casual and regular players, nevertheless, suggest that VLTs are not disproportionately played by individuals from lower income groups in Nova Scotia. Both casual and regular players are fairly representative of the Nova Scotia household income profile.

### 5.2.2 Incremental Government Fiscal Impacts of VLTs

As we have shown above, virtually all of the expenditures made on VLT play would remain in Nova Scotia if the VLTs were not available. Most of the expenditures would be made on other forms of gaming. However, because other forms of the gaming and leisure activities yield less tax revenue to the government, there would be an incremental fiscal impact on the Provincial treasury if VLTs are removed.

These incremental fiscal impacts would only occur if the current tax and Provincial revenue regimes that apply to the other forms of gaming and leisure are not changed. If VLTs were not available in Nova Scotia, the tax and revenue generation regime could be modified for other forms of gaming and leisure to make up the revenue shortfall. This might however be difficult because the operating costs of other forms of gaming are high compared to VLTs (see Table 5-2, above)

#### • Casual Players

Casual players spend about \$3.5 million/year on VLTs. Approximately \$2.3 million of this expenditure accrues to the government as revenue. As we point out above, the majority of this expenditure would likely revert to other forms of gaming or leisure activity in the absence of legal VLTs. The money would be spent in Nova Scotia. Assuming a best case scenario, that is, all of the money that would have been spent on VLTs will transfer to other forms of gaming in Nova Scotia, government revenue from the \$3.5 million/year would fall by \$1.8 million.

<sup>71</sup> Percentages prorated to account for "don't know/refused" answers (6 per cent of total).

<sup>72</sup> Percentages prorated to account for "don't know/refused" answers (13 per cent of total).

- **Regular Non-problem Players**

Regular non-problem players spend approximately \$51.5 million/year on VLTs and, therefore, contribute approximately \$34.2 million/year to government revenues. As described above, the data available in the Focal Survey and information from our Focus Groups suggest that this money will continue to be spent in the province on legal gaming activities. However, these individuals, unlike casual players, would likely move some of their VLT expenditures to VLTs on First Nations Reserves, if VLTs were not available in the rest of the province. Therefore, if regular non-problem players continued to spend on gaming activities in the province as the data suggest and continue with some VLT play on reserves, the negative impact on the Provincial treasury would be about \$25.8 million.

- **Regular Problem Players**

Problem players make net VLT expenditures of approximately \$62.1 million/year. About \$41.0 million of this amount accrues to the Provincial government as revenue. Again, as described above, the expenditures of this group would not leave the Province if VLTs were not available. The expenditures would go to other forms of legal and illegal gaming. We expect that the majority of the expenditures would go toward legal forms of gaming; however, problem players readily admitted that if illegal VLTs were available they would likely play them. Therefore, if problem players continued to spend on gaming activities in Nova Scotia and also engaged in some illegal gaming, the negative impact on Provincial revenues would be in the order of \$31.1 million.

- **Non-resident Players**

Non-resident players contribute about \$4.1 million/year in net VLT expenditures. About \$2.9 million/year accrues to Provincial government revenue. These players will likely switch their expenditures to other forms of legal gaming or leisure activities. The negative direct fiscal impact of such a switch from VLTs would be in the order of \$2.2 million.

### **5.2.3 Total Direct Fiscal Impact**

The total direct fiscal impact of the removal of VLTs would be in the order of -\$60.9 million/year. This would be the direct fiscal impact of the removal of VLTs, not the total fiscal impact. The total fiscal impact will be smaller because this amount of money, \$60.9 million/year would be left in the hands of the private sector for continued recycling through the Nova Scotia economy. This recycling would allow the government additional opportunities to collect revenue through income, sales, and other taxes.

### **5.2.4 Incremental Direct, Indirect, and Induced Government Fiscal Impacts**

The CANMAC impact analysis shows that on \$105.7 million in net VLT expenditures the major fiscal impacts are as follows:

- direct government revenue of \$68.7 million;
- sales tax of \$1.0 million (based on household income of \$35.9 million); and
- income tax of \$2.2 million (based on household income of \$35.9 million).

The total of the major fiscal impacts on \$105.7 million in VLT expenditures was shown as \$71.9 million.

Our parallel impact analysis is based on the diversion of \$121.1 million in net VLT expenditures to other forms of gaming and leisure activity. Based on Table 5-2, above, and the CANMAC impact results:

- direct government revenue will be \$19.8 million;
- sales tax will be \$1.1 million (based on household income of \$36.6 million); and
- income tax of \$2.2 million will be generated (based on household income of \$36.6 million).

#### **5.2.5 Total Incremental Government Fiscal Impacts**

The total of the major fiscal impacts on \$121.1 million in net VLT expenditures diverted to other gaming and leisure activities will be in the order of \$23.3 million versus the \$80.4 million collected from VLT play in fiscal 1998. The \$57.1 million incremental fiscal impact is due to two factors:

- other gaming activities return about 16 per cent of net gaming expenditures directly to government revenue versus 66 per cent for VLT expenditures;
- other gaming activities require about 73 per cent of the net gaming expenditures (i.e., gaming revenue after prizes are paid) to cover operating costs; and
- although the operating costs cause economic activity, it is taxed at a much lower rate than the 66 per cent applied to net VLT expenditures.

If there were not VLTs in the rest of Nova Scotia and First Nations Bands increased the number of VLTs on reserves to the maximum they are allowed to absorb some of the demand for VLT play, the NSGC will receive an additional \$1.2 million in service fees.<sup>73</sup> It is not clear how much of this revenue will revert to the Provincial government.

<sup>73</sup>

According to NSGC staff, new VLT agreements are being negotiated with Nova Scotia Bands. NSGC anticipates collecting a service fee of \$36 per machine/week on First Nations Reserves. Assuming Bands add all of the 409 machines they are permitted under current agreements, NSGC will receive \$1.2 million in additional fees.

### 5.3 Economic and Financial Costs

While monetary gains to the economy and Provincial Government are reasonably clear, the social costs discussed in Chapter 4 also translate into definable economic losses. The precise dollar value of these costs is, unfortunately, even more difficult to define. It cannot however be disregarded. Three major categories of losses are relevant:

- lost productivity,
- personal bankruptcy, and
- rehabilitation of problem players.

#### 5.3.1 Reduced Labour Productivity

Only limited research has been conducted on the effects of problem gambling on worker productivity. Even less has been completed with respect to problem VLT players. We do know, however, that 61 per cent of Nova Scotia's problem VLT players report full-time employment and another 15 per cent report part-time employment. Only 5 per cent identify themselves as unemployed. The remaining problem players are either in school (3 per cent) or out of the labour force (retired, homemakers, etc., 18 per cent). It is reasonable to assume that problem VLT play has some implications for the productivity of those who are workers.<sup>74</sup>

About 53 per cent of problem players lose track of time while playing VLTs versus 13 per cent and 5 per cent of frequent and infrequent players, respectively.<sup>75</sup> However, as the Focal Survey reports, it is not clear that VLTs are the cause of losing track of time or whether this absorption in play is not a sought-after effect. VLT players of all types report that their play helps pass time more quickly and distracts them from other problems they may have. This suggests that even with the elimination of VLTs, problem players who want to be distracted from their daily problems or pass time more quickly will use other forms of gaming to achieve the same effect.

The survey also reports that 27 per cent of problem players think about their VLT play when they are not playing, compared to 3 per cent and 1 per cent, respectively, for frequent and infrequent players.<sup>76</sup> The distraction created by VLT play often results in problem players missing or being late for family and work-related activities. The Focal Survey reports that 34 per cent of problem players missed significant family or personal

---

<sup>74</sup> Focal Research, 1997/98 Nova Scotia Video Lottery Players' Survey, Appendix D, Table 3.1.1, p. D-7.

<sup>75</sup> *Ibid.*, p. 3-61.

<sup>76</sup> *Ibid.*, p. 3-86.

events due to their VLT play. Only 3 per cent and 2 per cent of the frequent and infrequent players, respectively, reported similar events.<sup>77</sup>

A smaller percentage of problem players, 16 per cent, said that they missed significant work or school events due to their VLT play. Only 2 per cent and 1 per cent of frequent and infrequent VLT players reported missing significant work or school events. Only 4 per cent of problem VLT players said that they occasionally (i.e., more than once per year) missed or were late for significant work or school events in the preceding year.<sup>78</sup>

The data were not available to describe the number of events or their durations. Therefore, it is not possible to produce an estimate of the economic cost of missing or being late for work or school events. However, we can put some perspective on the magnitude of the economic value of lost labour to society. The average problem VLT player has an income of approximately \$35,300/year or about \$19/hour. Every lost hour of work is, in economic terms, worth at least \$19 to society. These lost hours make up part of the economic cost of problem gamblers.

Labour productivity impacts associated with problem gamblers are usually rooted in a broad complex of issues involving gambling, stress, marital discord, alcohol use, and so on. Hence, we cannot say that excessive VLT gaming is the sole or even the root cause of lower productivity in the workplace by problem VLT players.

There is no Nova Scotia-based study on the cost to society of problem VLT players. Estimates of the total cost of problem gamblers (not specifically problem VLT players) have been made in other jurisdictions. A report by MPM Gaming Research for NSAGA states that some estimates of the costs per problem gambler have been made "based on employment cost, lost labour, health treatment cost, money taken from family necessities, bad debts, criminal justice, rehabilitation support services, welfare cost, etc." These measures range from \$6,000 (U.S.) to \$14,000 (Canadian).<sup>79</sup> When more comprehensive estimates are prepared (e.g., including the social costs of reduced family time, community service, etc.) cost estimates rise significantly. For example, Hendriksson calculated that compulsive gamblers annually cost society about \$56,000 (Canadian) per compulsive gambler.<sup>80</sup>

---

<sup>77</sup> *Ibid.*, p. 3-88.

<sup>78</sup> *Loc cit.*

<sup>79</sup> MPM Gaming Research, "Towards a Convenience Model of Gaming and its Social Effects in Nova Scotia" in NSAGA, *Annual Gaming Report 1997-1998*, Volume II: Appendices, Appendix F, p. 46.

<sup>80</sup> Lennart E. Hendriksson, "Hardly a Quick Fix: Casino Gambling in Canada" in *Canadian Public Policy*, Volume XXII number 2, June 1996, p. 120. The three figures cited come from a 1995 U.S. study and 1996 and 1997 Canadian studies. Converting the US\$ to Canadian, and bringing both figures to current values, the rough mid-point of the two lower estimates is \$11,600. We



### 5.3.2 Personal Indebtedness and Bankruptcies

Researchers have done limited analysis of the underlying reasons for personal bankruptcies. The data do not allow us to determine the extent to which gambling, and more specifically VLT gaming, contributes to the occurrence of personal bankruptcy.

There is, nevertheless, strong evidence that problem VLT gaming is associated with financial distress. There were, for example, many references among problem players in our Focus Groups to borrowing and bad debt (see Sections 4.3.4, 4.3.5 and 4.3.6, above). The Focal Survey found that 44 per cent of problem players have gone into debt to pay for their VLT gambling. This compares to 3 per cent and 2 per cent of frequent and infrequent VLT players, respectively.<sup>81</sup> Of the problem players that have gone into debt to pay for VLT gambling, 34 per cent reported that they had difficulty paying back the money versus 2 per cent and 1 per cent for frequent and infrequent players, respectively.<sup>82</sup>

Our Focus Group research and the Focal Survey support the observation that problem VLT players are willing to use a wide variety of methods to support their gaming activity. In many cases, they gamble money meant for other purposes. For example, according to the Focal Survey, the following sources are used by problem players to finance their gaming:

- postponed or did not pay bills, 33 per cent;
- savings, 23 per cent;
- household money, 22 per cent;
- credit cards, 21 per cent;
- friends, 17 per cent;
- family, 15 per cent;
- bank over drafts and lines of credit, 14 per cent;
- sale of personal property, 11 per cent; and
- delay or do not make mortgage or rent payments, 9 per cent.

It becomes clear that problem VLT players do not borrow money from commercial institutions specifically to play VLTs. Rather, their borrowings appear to be the result of the need to pay back the previously noted sources they have used to finance their VLT play. This being the case, as the Focal Survey points out, the actual debt incurred due to VLT play by problem players may be much higher if they are not ascribing some of their debt load to VLT activity. For example, if a player remortgages their home to pay down debts incurred through VLT play, they may, in time, associate the full mortgage debt with

---

have used \$11,600 in subsequent calculations to maintain conservative estimates of the impact of problem gambling.

<sup>81</sup> Focal Research, 1997/98 Nova Scotia Video Lottery Players' Survey, p. 3-90.

<sup>82</sup> *Ibid.*, p. 3-91.

the cost of owning a home and forget the portion of their mortgage that is due to gambling.

Until more work is done to determine the root causes of extensive indebtedness and personal bankruptcy, it will not be possible to identify the full extent to which gambling – or even more specifically, VLT gambling – is responsible for personal debt and bankruptcy problems in Nova Scotia. However, the data clearly indicate that VLT gambling by problem players leads to diversion of money from a variety of personal sources and borrowing from friends, family and, ultimately, commercial sources. Information presented here also suggests that if VLTs are eliminated, problem players will likely shift their activity to – or back to – other forms of legal and illegal gaming.

### 5.3.3 Rehabilitation Costs

The Players Survey by Focal shows that 10 per cent of regular and problem players have sought information or assistance to get help to control their VLT play. This amounts to approximately 4,540 people. However, two-thirds of problem VLT players (4,300) have neither sought nor received assistance in dealing with their problem play.<sup>83</sup>

The Focal Survey also found that 70 per cent of problem VLT players (4,480) have tried to stop within the last year, indicating that almost half of those problem players who did try to stop did so without seeking or receiving formal or informal assistance in dealing with their problem play. About 26 per cent (1,165) reported that their attempts to stop were ongoing. These data also suggest that 70 per cent of problem gamblers are open to some form of assistance.<sup>84</sup>

The survey also found that problem VLT players made up 70 per cent of those who received unsolicited assistance for their gambling.<sup>85</sup> Based on this finding, it appears that, as the survey suggests, the sources of aid for VLT players have been reasonably successful in targeting the problem VLT gambler.

Of the problem of players who sought – or received unsolicited – assistance, the following sources were the most common:

- spouse or partner, 17 per cent sought assistance (7 per cent received unsolicited assistance);
- friends, 12 per cent (8 per cent);
- other family, 10 per cent (4 per cent);
- Gamblers Anonymous, 9 per cent (3 per cent);
- family doctor or therapist, 8 per cent (1 per cent);

---

<sup>83</sup> *Ibid.*, pp. 3-101-3-102 and 3-104.

<sup>84</sup> *Ibid.*, p. 3-95.

<sup>85</sup> *Ibid.*, p. 3-101.

- gambling help line, 5 per cent (2 per cent);
- drug dependency services, 5 per cent (1 per cent);
- work colleagues, 3 per cent (1 per cent);
- community centre services, 3 per cent (1 per cent); and
- church or religious groups, 2 per cent (0 per cent).<sup>34</sup>

No one source of assistance dominates the responses. Limited data are available to assess the total cost of support services to problem gamblers and, more specifically, problem VLT gamblers. As of February 1, 1999, the balance in the VLT Problem Gaming Fund, which has been built from contributions of NSGC and VLT retailers, stood at \$2,560,851, as noted in Section 2.2, above. To date, monies have been allocated from this fund as portrayed in Table 5-3, leaving an uncommitted balance of \$1,599,575. As the table indicates these expenditures have gone to studies and to leverage the development of problem gambling-related services. Clearly, other monies fund rehabilitation services, including other government agencies, MSI, private insurance, and charities.

**TABLE 5-3: VLT Problem Gaming Fund Disbursements**

Group	Funds	Project
<b>Disbursed as of February 28, 1999</b>		
Compulsive & Problem Gamblers Society	\$109,038	Start-up costs for an outreach centre
Dalhousie University	\$89,013	VLT Harm Reduction Study
NS Department of Health	\$20,716	French translation of "Drawing the Line" educational supplements
Sub-total	\$218,767	
<b>Approved in principle</b>		
Self Help Connection	\$304,820	Self help program for problem gamblers
NS Department of Education and Culture	\$380,200	Education curriculum for problem gambling prevention (Grades 4 to 6)
Dalhousie University - Phase II	\$169,186	Research study on factors affecting play on VLTs by social and pathological gamblers
Compulsive & Problem Gamblers Society	\$107,070	Same as above
Sub-total	\$961,276	
<b>TOTAL</b>	<b>\$1,180,043</b>	

Source: Nova Scotia Gaming Corporation

In addition, data are not available describing the effectiveness of these various sources of support. Additional work needs to be done to examine the success of support services in

<sup>34</sup> *Ibid.*, p. 3-105.

helping problem players deal with their excessive VLT play before analysts can estimate the full financial cost of rehabilitation services.

Previously presented data (Section 5.3.1) on the cost to society of problem gamblers suggest that current problem VLT players cost the provincial economy in the order of \$74.2 million (6,400 x \$11,600/problem VLT player). This is roughly 8.0 per cent (\$6.2 million) less than the Provincial incremental revenue generated by VLT play in fiscal 1998. We hasten to point out that our Focus Group research as well as many other studies indicate that, if VLTs are eliminated, problem VLT players will likely transfer their gambling activities to other forms of legal gaming, including VLT play on First Nations Reserves, or to illegal gaming. The simple removal of VLTs from Nova Scotia does not mean that these costs would be avoided. There are indications that if VLTs are not available fewer people may become involved in excessive gambling. However, at the same time, our Focus Groups and the work of other researchers indicate that shifts to excessive or problem gaming by VLT players are often associated with major life changes (e.g., retirement, divorce, death in the close family). If VLTs were not available "problem VLT gambling behaviours" that seem to be associated with these major life changes may well express themselves in other forms of gambling or other activities that have their own negative personal, social, and economic impacts.

## 5.4 Other Considerations

Within the measures of incremental economic and fiscal impacts outlined above are impacts on various sub-groups affected both positively and negatively by a ban or other restrictions on VLTs. These include the following:

- distributors and operators of illegal VLTs, whose business may return to pre-1991 levels;
- First Nations bands, which may expect an increase in clientele deflected from currently legal VLTs;
- other gambling operators such as casinos, lotto ticket sellers, harness racing businesses, and charities offering gambling options; and
- licensed establishments, which will lose income currently generated by VLTs.

While these issues are important, quantitative information on which to base an accurate economic assessment is generally thin. We have attempted below, however, to outline the main issues related to each category using such statistical and anecdotal information as we have been able to obtain.

### 5.4.1 *Illegal VLT Distributors and Operators*

As noted above, illegal VLTs were a major reason why the Nova Scotia Government legalized the machines in 1991. Our previous discussion also indicates that these machines persist to a degree in the province. Some problem gamblers in our Focus Groups indicated that they would probably seek out these machines if VLTs are made illegal again.

Most of the research on changes in crime levels as they relate to gaming has been focussed on the destination type gaming activities engaged in at casinos. There has been virtually no research on the relationship of changes in crime rates and the prevalence of VLT play. We do know, however, that crime related to problem VLT use tends to be of the white-collar type, such as forgery, embezzlement, and fraud.<sup>87</sup>

As we reported above, VLT use is growing at a faster rate than the overall Provincial economy. Furthermore, the profit rate on VLT expenditures is very high. It is our view that the strong, growing demand, combined with the high profit rate and cash nature of the VLT business makes the ownership of illegal VLTs attractive. Before legalization, it was estimated that there were 1,500 to 2,000 illegal VLTs operated in Nova Scotia.<sup>88</sup> The Province moved to eliminate the illegal machines by legalizing and regulating VLTs in 1991. Subsequently, of course, they restricted the machines to licensed establishments.

Based on our research, we find that VLTs are in high demand, the demand is growing, and the machines offer a high profit rate. We also know they are inexpensive to acquire and can be operated in modest facilities. In these conditions, a moratorium on the number of VLT machines in the province will tend to increase the attraction of operating illegal VLTs. This will be the case if the moratorium limits supply to the point that players are willing to seek out illegal machines as a source of their gambling entertainment. Increases in the number of VLTs on First Nations Reserves, as discussed following, will not fully stem the attraction to own and use illegal VLTs if demand continues to grow in the face of the moratorium because VLT gaming among those who provide 90 per cent of VLT net revenue is a regular activity. The inconvenience of travel to a VLT site at a reserve will likely induce some players – especially problem players – to use illegal machines. A ban, of course, would further stimulate movement to illegal VLTs.

#### 5.4.2 First Nations Bands

VLTs on First Nations Reserves are not restricted by the current Nova Scotia VLT moratorium. They will also not be covered by a ban, if one is imposed. In terms of current practice, the Focal Survey found First Nations establishments account for 8 per cent of VLT gambling. In fiscal 1998, net VLT receipts of First nations VLTs were \$11.6 million.<sup>89</sup>

If VLTs cease to be available at other establishments in the province, First Nations gambling establishments will benefit, as some of the previous VLT play is diverted to their sites. At present, according to NSGC, there are approximately 575 VLT sites with 3,228 machines in Nova Scotia (see Table 1-1 above). Ten of 13 First Nations have also signed agreements with the Province and now operate another 397 VLT machines that are

<sup>87</sup> MPM Gaming Research, *op cit.*, p. 60.

<sup>88</sup> NSAGA, *Annual Gaming Report 1996-1997*, Volume 1, p. 31.

<sup>89</sup> Letter from Dara Gordon, Q.C., April 14, 1999.

well-distributed across Nova Scotia (Table 5-4).<sup>90</sup> If VLTs were not available in the rest of Nova Scotia, the number of VLTs on reserves could be increased. As Table 5-4 shows, there is a potential for reserves to add 409 VLTs under current agreements.

Reserves were the alternative most frequently cited by problem VLT gamblers in our Focus Groups, if VLTs are banned. At least one problem gambler we consulted said she already does most of her gambling on a reserve. Remembering that approximately half of the \$121 million in net VLT revenue is provided by problem players, we can assume that a maximum of \$60 million in net VLT revenue could be diverted to native gambling sites. We say maximum because VLT gaming by problem players would also be diverted to other forms of legal convenience gaming, illegal VLT machines, and other forms of illegal gaming such as card games at private businesses or households. The diversion of problem player VLT expenditures to First Nations gaming establishments would also not be complete due to the inconvenience of travelling greater distances to these sites many times a month.

**TABLE 5-4: VLTs on First Nations Reserves, Nova Scotia, February 28, 1999**

First Nation	Counties	Number of VLTs	Maximum Allowed
Acadia	Yarmouth	45	70
Annapolis/Cambridge	Annapolis	18	18
Chapel Island	Richmond	28	44
Eskasoni	Cape Breton	63	200
Horton	Kings	18	24
Millbrook	Colchester, Halifax	110	110
Pictou	Pictou	0	20
Shubenacadie/Indian Brook	Hants	41	175
Wagmatcook	Victoria	28	50
Waycobah	Inverness	46	95
<b>TOTAL</b>		<b>397</b>	<b>806</b>

Sources: Nova Scotia Gaming Corporation, Statistics Canada, and Confederacy of Mainland MicMacs

<sup>90</sup> Letter from Dana Gordon, Q.C., April 14, 1999.

Non-problem players provide about 40 per cent of net VLT revenue. These players would be less likely to divert their VLT play to the illegal VLT machines. Based on our Focus Group research, we believe that the majority of regular VLT player expenditures will be directed to other forms of legal gaming with a smaller portion going to other forms of entertainment. In addition, the increased travel distance to First Nation VLT gaming sites will reduce the diversion of regular VLT players' expenditure to these sites. As a rough estimate, we would suggest that approximately \$20-24 million in net VLT expenditures could be diverted from the non-problem regular player VLT activity to sites on First Nations Reserves.

The remaining 10 per cent of net VLT revenue is provided by casual players and tourists. Virtually all of this expenditure would be diverted to other forms of entertainment, among which gaming would be a small part. We do not expect any substantial diversion of casual VLT expenditures to First Nations gaming establishments.

Existing First Nations machines generated an average of \$29,200 in net revenue in 1998, whereas the average off-reserve machine earned about \$36,000. If no new First Nation machines are added, the 397 existing units could absorb \$4.3 million more in net revenue, assuming First Nations VLTs can increase their earnings to \$40,000 per year in a more restricted market. If, in addition, Bands install the 409 additional machines, they are allowed they could absorb another \$16.4 million based on the same potential revenue per machine. This suggests a total potential increase in First Nations net VLT revenue of \$20.7 million.

#### 5.4.3 Other Gambling Operators

There is considerable speculation about the influence of VLTs on other gambling options. Our foregoing economic and fiscal analyses assume that VLT play is related to other forms of gambling. Based on the Focal survey and our own Focus Groups, we anticipate a VLT ban will most likely divert a substantial portion of monies now gambled on the machines to other forms of gambling.

Among gambling alternatives, as noted, are casinos, lotto tickets, harness racing, and charitable gambling. Three of these options appear to be thriving in Nova Scotia: lotto tickets, charitable gambling, and casinos. Harness racing, on the other hand, is widely regarded as in decline.

The most recent NSAGA Annual Report, shows expenditures on "Interprovincial Lottery Schemes" increased by 5.6 per cent from \$173 to \$182 million from 1997 to 1998. As noted above, expenditures on "Charitable Lotteries and Raffles" rose 11.3 per cent from \$10.5 to \$11.6 million. The two casinos increased their net wager the most, between \$196 and \$251 million,<sup>91</sup> although operators have publicly expressed concern with lower than

<sup>91</sup> *Ibid.*, Volume 1, pp. 16-17.

expected profits. Wagers at the casinos and through charitable gambling increased relative to VLT play, which we have previously noted increased by 8.1 per cent.

NSAGA does not report the net wager for the harness industry. The industry is described in the Annual Report as "ailing" at the time it was taken over by the Atlantic Lottery Corporation (ALC) in 1998.<sup>92</sup> According to NSGC, on behalf of which ALC administers harness racing, "[t]he projected gross wager for harness racing for the period April 1, 1998 until March 31, 1999 is \$11.29 million" and "[t]he gross wager for harness racing for the period April 1, 1997 to March 31, 1998 was \$9.86 million."<sup>93</sup> The \$11.29 million figure compares to a \$12.46 million parimutuel wager report for 1995.<sup>94</sup> Although the data are not directly comparable to the NSAGA numbers, it would appear that the scale of betting on harness races is similar to charitable gambling in Nova Scotia. The comparison of past and projected figures also suggests NSGC anticipates an increase in wagers of 14.5 per cent, which would presumably reflect an industry turnaround.

A Dalhousie researcher, Christian Marfels, has published a study on the relationship between VLT and casino expenditures. He noted on the basis of evidence from South Dakota, Manitoba, and Nova Scotia, that introduction of one of these gaming options after the other was established, did not appear to have an effect in any of these three jurisdictions. With respect to Nova Scotia, he interviewed proprietors of three licensed establishments within 30 minutes drive of the Sheraton Casino and found that following an initial decline in VLT play lasting two or three months after the casino opened, players returned to the VLTs and overall play may have actually increased. He also points to NSAGA and NSGC statistics that indicate both casino wagers and VLT play have since risen together.<sup>95</sup>

Marfels' thesis is that VLTs supplement rather than substitute for casino gaming. This is because gaming is a rising market attracting new, discretionary income gained by the general population. In reverse, we do not expect this mechanism to work in the same way, however. VLTs have probably not caused a decline in other gambling pursuits, even harness racing, and may have encouraged the growth of a "gambling culture."

As noted, VLTs are a form of convenience gaming. They are widely available, inexpensive on a per play basis and offer immediate feedback. Therefore, their removal

<sup>92</sup> *Ibid.*, Volume 1, p. 1. The purported reason for Atlantic Lottery's involvement was to bring its marketing expertise to bear.

<sup>93</sup> Letter from Dara Gordon, Q.C., April 14, 1999.

<sup>94</sup> Nova Scotia Gaming Control Commission, *The First Annual Report, Nova Scotia Gaming Control Commission*, August 21, 1996, p. 43.

<sup>95</sup> See: Christian Marfels, "Casino Gaming and VLT Gaming: Substitution Effect or Supplementation Effect?" in *Gaming Law Review*, Volume 1, number 1, 1997, pp. 333-342.



will not likely have a major impact on destination gaming at casinos but may have larger effects on other forms of convenience gaming (e.g., scratch and win tickets, bingo). Our research indicates that problem VLT players contribute about half of net VLT revenue and that, if VLTs are eliminated, these people will find other outlets for their gaming activity. Regular non-problem players contribute about 40 per cent of net VLT revenues. These individuals will likely continue to gamble but may also divert significant portions of their VLT expenditure to other forms of entertainment in Nova Scotia. Casual and tourist VLT players contribute about 10 percent of net VLT revenues. If VLTs were removed, their expenditures would likely go toward others forms of entertainment.

The removal of VLTs would likely increase the amount of other gaming, especially convenience type gaming but, on balance, the overall amount of gambling in the province would probably decline. The overall reduction will depend on the extent to which businesses can exploit remaining legal gaming options to attract the convenience player. It could, for example, give rise to development of new gaming options in the context of Provincial regulations by some of the existing operators or by new gambling entrepreneurs to sustain public interest. The degree to which each sector will be influenced, however, is impossible to discern. Harness racing, for example, may have been impacted by the growth in other gaming opportunities during the 1990s but it has also been affected by shifts in lifestyle, including continued decline in the proportion of our population engaged in agriculture, where there is a clear and direct affinity for horses. The future of this industry probably will depend far more on the success of recently initiated efforts to market the sport better than by reducing assumed "competition."

#### 5.4.4 *Licensed Establishments*

Several observations have been made that VLTs provide an important source of revenue to licensed establishments and that without them some weaker establishments might go out of business. Certainly, a strong argument can be expected from proprietors of these establishments if a VLT ban is seriously contemplated, just as local store owners protested their removal to licensed premises in 1993.

The data indicate that there may be some foundation to this argument. The latest Statistics Canada data (1995) indicate that in Atlantic Canada the average:

- profitable licensed restaurant had a net profit of \$18.8 thousand, before taxes;
- non-profitable licensed restaurant showed a net loss of -\$26.0 thousand;
- profitable bar, tavern, or night club showed a net profit of \$19.2 thousand; and
- non-profitable bar, tavern, or night club had a net loss of -\$10.6 thousand.<sup>96</sup>

In 1995, about 50 per cent of licensed restaurants in Atlantic Canada showed a pre-tax profit and 55 per cent of taverns, bars, and night clubs had a pre-tax profit. NSAGA

<sup>96</sup> Statistic Canada, *Small Business Profiles, Atlantic Canada, 1995*. See SIC Q9211, and Q9221.

reported that in fiscal 1996 VLTs paid about \$21.2 million to commercial entities at about 600 sites.<sup>97</sup> This amounts to about \$35,300 per site.

Based on these data it seems clear that the revenue from VLTs plays an important role in the profitability of licensed establishments. The expense related to the operation and maintenance of VLTs is limited. Therefore, even after these expenses are deducted, it is clear the revenue from VLTs is a key factor in the profitability of many licensed establishments in Nova Scotia. However, because spending on VLTs does not account for any significant new spending in Nova Scotia, the positive financial effects on these establishments are mostly offset (as indicated by the net impact analysis) by negative impacts on establishments at which money would have been spent if VLTs did not exist in the province. In the event licensed establishments cease to have the benefit of VLTs, therefore, we would anticipate VLT expenditures would be redirected to other sectors of the Nova Scotia economy.

---

<sup>97</sup>

NSAGA , *Annual Gaming Report 1996-1997*, pp. 25 and 136.

## **APPENDIX A - Slot Machine/VLT Payout Percentage**

### **Slot Machine/VLT Payout Percentage**

There are two game types used in the field of slot gaming, "skilled" and "non-skilled". A reel game or 8-line type of game is considered a "non-skilled" game as the user has no influence over the outcome. A "skilled" game is one where the player does have some interaction and control over the outcome (i.e. Poker or any other card game where the player has to make choices).

#### **Non-Skilled Games**

Games based on luck only, or line-up games as previously mentioned, are extremely simple to calculate the payout percentage. For instance, if a slot machine with 3 reels has 20 different symbols on each reel, and can only stop at a symbol, the total combinations can be figured out as follows;  $20 \times 20 \times 20 = 8,000$ . Therefore, that game would have 8,000 different combinations. Depending on how many combinations are available for each win, the likelihood of those combinations can be determined. Once the theoretical frequency of each combination is determined, a win value can be associated with each.

Knowing how often a win or a loss will occur, the coin out, or credits won, is simply multiplied by the frequency of that outcome (i.e. if a row of Bars is worth 20 coins/credits, and it's likely to happen 100 times out of 8000, we know, based on that combination alone, we will pay out 2000 coins/credits).

The overall payout percentage is calculated by adding up all of the total payouts for each combination. If the total payout for a game is 7300 coins when we had 8000 coins/games played, the payout percentage would be  $(7300/8000) = 91.25\%$ .

#### **Skilled Games**

A new variation comes into play here as the player has some influence over the actual outcome (which inevitably will cause the payout to be lower than the theoretical payout considering the optimal play strategy would have to be used 100% of the time to reach the theoretical payout). Using a standard 52 card deck, the possible combinations are over 2.5 million, and with a Joker involved that number goes to over 2.8 million, and higher again if you have more wild cards (i.e. Deuces Wild).

To test these paytables, they are simulated through the use of a computer program that uses the optimal hold strategies. From this point, the same theory applies as described in the non-skilled games in that once the frequency of all winning combinations is determined, you multiply that number times the win value for each, add them all up, and divide by the total games played or combinations.

### Changing a Paytable

To change a paytable in a non-skilled game, one could simply replace one symbol with another or change the credit/coin reward for that win combination. To change the paytable on a skilled game, the option of adding or changing a symbol does not exist. In this case you must change the credits/coins awarded for one or multiple winning combinations.

### Actual Pay-outs

All of the above is based on theoretical outcomes and in reality is never exact. An industry standard of 10 million game plays (no reference to dollars wagered) is used as the benchmark to determine the accuracy of the paytable. After 10 million plays, the payout percentage should not be off by any more than .2%.

The key thing affecting the theoretical payouts of "non-skilled" games is the sheer size of the reels that allow for millions of combinations (i.e. it is not uncommon for some line-up games to have \_\_\_\_\_ million combinations). If an extremely high payout is associated with the jackpot combination, and it's won twice in a short time, it will take several thousand, if not millions of plays, to bring that average back down to the theoretical payout. Conversely, if there are several million combinations, the actual pay-out percentage may vary greatly with smaller variations as the 10 million game play mark is achieved.

With a skilled game like Poker, we know there are only 2.5 million combinations, and we also know that all players are trying to win. Therefore, using the computer generated simulations, the results are most often very close to the theoretical pay-outs within a few thousand game plays, understanding the only affect the player could have is to decrease the amount of wins by not making the right decision, therefore, decreasing the actual pay-out.

In general, games involving skill will pay lower than the theoretical payout (by a few percentage points) at the start, and continue to climb toward the theoretical values as the players knowledge of those games increase. Non-skilled games can vary greatly depending primarily on the size and quantity of the reels. Field experience indicates that the majority of non-skilled games will be very close to the theoretical payouts.

### Hit Ratios/Frequency

The last factor affecting the payout is "hit ratios". That is the frequency of winning combinations (no association to the win value). To demonstrate I will choose an extreme scenario; assume a slot game has 10,000 combinations and only pays for one winning combination. All others are considered losing outcomes. If the winning combination pays \$9,000, this game would still have a payout percentage of 90% ( 9,000 / 10,000 ). The problem here is that nobody would play this as the "hit ratio" is too low. The opposite of this of course is assuming you always win your bet back 9 out of 10 times. Again you have the same ratio, but there is no fun, and you never have a chance to win big.

Understanding this, any gaming program likes to be able to provide a good mix of game offerings, hit ratios, and possible payout percentages. In doing so, you have covered the spectrum for player satisfaction, but to evaluate the actual results of payouts, one must compare apples to apples and can only look at the exact same game configurations, or review each game on its own keeping in mind the number of games played to date. (If the hit ratio is low on a certain game, and the larger wins are won early, this game will have a higher than theoretical pay-out; if the hit ratio is very high the game is likely not to have many chances for larger wins and this type of game would tend to follow the theoretical pay-out more closely).



## APPENDIX B - Problem Gambler Screen

99-055K

### VIDEO GAMBLING SCREENER

Good afternoon/evening, my name is and I am calling from Sterling Research. We are inviting people to a discussion group about gambling, and those who attend will be paid for their time. Would you or anyone else in your household be interested in attending our discussion group on the evening of . . .

Yes ☐ **CONTINUE**

No ☐ **THANK THEM FOR THEIR TIME**

In order to get a wide range of participants, there are some qualifying questions that I need to ask you.

#### RECRUIT 10 FOR 8 TO SHOW

1. Are you or anyone in your household or immediate family involved in any of the following:

Advertising or Graphic Arts .....	1
Marketing .....	1
Marketing Research .....	1
Public Relations .....	1
Any Radio, Television, or Print Media .....	1
Any Gambling Self Help Group such as Gamblers Anonymous or Gamanon .....	1

**IF YES - THANK AND TERMINATE**

- 2a. I am going to read a list of gambling activities and I would like you to indicate which--if any--you participate in on a **weekly basis (ie. at least once a week)**:

	<u>YES</u>	<u>Q2b Amount Spent</u>
Lotto 649 tickets .....	1	_____
Scratch or Break Open tickets .....	1	_____
Bingo .....	1	_____
Video Lottery Machines (VLT) .....	1	_____
Slot Machines .....	1	_____
Table Games at a Casino .....	1	_____

- 2b. Go back to Q2a and for each YES ask: Approximately how much money would you spend in a typical week on.....?

**Note: Group 1 MUST NOT Have Ever Played a Video Lottery Machine  
Group 2 & 3 MUST Have Played Video Lottery AT LEAST ONCE PER WEEK**

3. Have you ever attended a Focus Group or one on one interview where you were paid for your time?

Yes ..... 1 CONTINUE (MAXIMUM 50% OF GROUP)  
No ..... 2 GO TO Q6

4. If yes, how many groups have you attended in total? \_\_\_\_\_

IF MORE THAN 5 (AND IT HAS NOT BEEN FIVE YEARS SINCE LAST GROUP) THANK AND TERMINATE

5. Have you attended a Focus Group within the past six months?

Yes ..... 1 THANK AND TERMINATE  
No ..... 2

6. How long have you lived in Nova Scotia? \_\_\_\_\_  
IF LESS THAN TWO YEARS - THANK AND TERMINATE

Read:

I am going to ask you a list of questions about your gambling. The questions are from a questionnaire used across North America. There are no right or wrong answers, and I would appreciate it if you would answer each question as honestly as you can.

In the past year, when you gambled

GROUP 1

In the past year, when you have played Video Lottery, GROUP 2 & 3

how often did you go back another day to win back money you lost? Would you say:

Never ..... 1  
Some of the time ..... 2  
Most of the time ..... 3  
Every time ..... 4

In the past year, have you ever claimed to be winning money

gambling GROUP 1

playing VLT's, GROUP 2 & 3

but weren't really? In fact, you lost?

Never ..... 1  
Yes, less than half the time I lost 2  
Yes, most of the time I lost ... 3



Do you feel you have had a problem with betting money on gambling activities such as bingo or lottery tickets **GROUP 1**  
 Video Lottery **GROUP 2 & 3**  
 in the past year?

No ..... 1  
 Yes, but not now ..... 2  
 Yes ..... 3

In the past year, did you ever spend more time or money gambling **GROUP 1**  
 playing video lottery **GROUP 2 & 3**  
 than you intended to?

No ..... 1  
 Yes ..... 2

In the past year, have people criticized your gambling **GROUP 1**  
 video lottery play **GROUP 2 & 3**  
 or told you that you had a gambling problem, regardless of whether or not you thought it was true?

No ..... 1  
 Yes ..... 2

In the past year, have you ever felt guilty about what happens as a result of your gambling **GROUP 1**  
 playing Video Lottery? **GROUP 2 & 3**

No ..... 1  
 Yes ..... 2

In the past year, have you felt like you would like to stop gambling **GROUP 1**  
 playing video lottery **GROUP 2 & 3**  
 but didn't think you could?

No ..... 1  
 Yes ..... 2

In the past year, have you ever hidden any signs of gambling **Group 1**  
 playing video lottery **Group 2 & 3**  
 from your spouse, partner, children or other important people in your life?

No ..... 1  
 Yes ..... 2

In the past year, have you ever argued with people you live with over monies won or lost  
 gambling Group 1  
 from Video Lottery? Group 2 & 3

No ..... 1  
 Yes ..... 2

In the past year, have you ever borrowed from someone and not paid them back as a result of your  
 gambling Group 1  
 video lottery play? Group 2 & 3

No ..... 1  
 Yes ..... 2

In the past year, have you ever lost time from work or school due to  
 gambling Group 1  
 playing video lottery? Group 2 & 3

No ..... 1  
 Yes ..... 2

In the past year, have you ever done any of the following to  
 gamble Group 1  
 play video lottery Group 2 & 3  
 or to pay for debts as a result of your (gambling) (playing video lottery)?

Yes    No

Borrowed monies from your Household .....	1	2
Borrowed monies from your Spouse/Partner .....	1	2
Borrowed monies from your Relatives or In-laws .....	1	2
Borrowed monies from your Banks, Loan Companies or Credit Unions .....	1	2
Borrowed monies on your Credit Cards .....	1	2
Cashed in stocks or bonds .....	1	2
Sold personal or family property .....	1	2
Intentionally bounced cheques .....	1	2

Total              
 20

**Note:** Group 1 cannot score MORE than 2 points - Terminate if above 3  
 Group 2 cannot score MORE than 2 points - Terminate if above 3  
 Group 3 cannot score LESS THAN 10 POINTS - Terminate if less than 10

F) What is the highest level of education you received? **[READ]**

Less than Highschool .....	1
Highschool .....	2
Trade school .....	3
Some College/University .....	4
Graduated College/University .....	5

G) What is your occupation? \_\_\_\_\_

H) In what age category may I place you?

19 - 34 .....	1
35 - 44 .....	2
55 + .....	3

**Good Mix**

We would like to invite you to attend our group discussion. It will last approximately 1½ hours and you will be paid

**Group 1: \$35.00**

**Group 2: \$50.00**

**Group 3: \$50.00**

for attending.

The discussion will be held at:

Instructions to Participants

1. You must be on time, or you will not be admitted.
2. This invitation is not transferable. Only you can attend.
3. If for any reason you cannot attend please call as soon as possible.

You will receive a letter with the location and time, and a confirmation call the day before to confirm your attendance. Is there a convenient time we could call you?

TIME: \_\_\_\_\_

NAME: \_\_\_\_\_

TELEPHONE #(H) \_\_\_\_\_

ADDRESS: \_\_\_\_\_

OTHER TEL # \_\_\_\_\_

Recruited By: \_\_\_\_\_

Date: \_\_\_\_\_

Confirmed.....[ ] Initial \_\_\_\_\_

Date: \_\_\_\_\_

Rescreensd.....[ ] \_\_\_\_\_



## APPENDIX C - Focus Group Discussion Outline

99-055K

Video Lottery Socioeconomic Impacts

January 1999

### Non Video Lottery Players

#### Introduction:

- Provide an introduction of researcher and company. The researcher/company is not connected to the client in any way. Explain the Focus Group technique, audio-taping, (and the two-way mirror). Tell the participants how and why they were selected, and that there are no right or wrong answers. We want their honest thoughts on the topic(s). Disagreeing with someone in the group is okay, but remember to respect others' opinions also. Ask them to try to speak clearly and one at a time so as not to garble the audiotape.

#### Warm-Up:

- Individual introductions of participants: first names only.
- What types of gambling – if any – do you participate in regularly? What would be their favourite form of gambling and what is it about that particular gambling activity that they like?
- What types of things do they like to do when they are not participating in their favourite form of gambling? How often do they do these things?

#### Part A.

##### 1. Perceptions of Video Lottery?

I would like you to describe for me, as a group – a frequent video lottery player – **who does not have a problem with their video lottery play.**

**Briefly** probe for age, gender, level of education, marital status, where they live etc.

Okay, so we have this person who **does not** have any problems playing VLTs. What kinds of impacts – positive or negative – does their VLT play have on their lives?

**Ensure that personal observation is separated from hearsay**

Probe if not mentioned

**Positive** – Stress Relief, escape from daily pressures  
Chance to socialize with others

**Negative** –Relationships with others? Neglecting family responsibilities to play VL?  
Loss of time of work or school to play VL? Become unemployed?  
Finances?  
Borrowing of money? From where (Household monies, family, friends, banks, etc.)  
How far in debt would they be?  
Selling personal effects?

Going to food banks / attempting to obtain other types of assistance as a direct result of playing VL (Social assistance/Social Workers – even temporary)?  
Stealing/trouble with the law (eg. selling drugs to play VL)?  
Personal Health – inability to sleep, unhealthy eating habits, increased smoking, drinking etc.  
Health System – sought assistance from counsellors, help line, attempted suicide.

Now I would like you to describe for me a person who has a serious problem controlling their Video Lottery play.

Briefly probe for age, gender, level of education, marital status, where they live etc.

What kinds of impacts – positive and negative – do you feel playing video lottery would have for this person?

Ensure that personal observation is separated from hearsay

Positive – Stress Relief, escape from daily pressures  
Chance to socialize with others

Negative – Relationships with others? Neglecting family responsibilities to play VL?  
Loss of time of work or school to play VL? Become unemployed?  
Finances?  
Borrowing of money? From where (Household monies, family, friends, banks, etc.)  
How far in debt would they be?  
Selling personal effects?  
Going to food banks / attempting to obtain other types of assistance as a direct result of playing VL (Social assistance/Social Workers – even temporary)?  
Stealing/trouble with the law (eg. selling drugs to play VL)?  
Personal Health – inability to sleep, unhealthy eating habits, increased smoking, drinking etc.  
Health System – sought assistance from counsellors, help line, attempted suicide.

If not mentioned. Do any of you personally know someone who has a problem playing video lottery. By personally, I mean a member of your family or a close friend, not someone down the street.

Go back through the list of negatives and [if thought of for video lottery] ask, are these things confined to Video Lottery or are there other activities that would lead to similar consequences? Probe for both illegal and legal activities.

Some people think that video lottery should be removed from the province, while others think it should be up to each individual to be able to choose whether or not they play VL. How about yourselves? Do you think VLTs should be removed or should people be allowed the choice to play?

What reasons would we have to remove them?

What reasons would we have to allow people the choice to play them?

(If not mentioned) Do VLTs provide any benefits for the province?

Do VLTs provide any costs for the province?

What if today, as we speak, video lottery was made illegal? All of the machines were removed overnight from the bars and licensed lounges where they are presently. How do you think people who presently play them would react?

Probe for illegal machines, other forms of disordered gambling.

(If not mentioned) - What about First Nations Reserves? How many present video lottery players do you think would frequent these locations to play VL?

Is there anything that can be done to reduce concerns and overall opposition to VLTs or not?

If yes, what kinds of things?

Wrap-up:

Questions from Observers

Questions from Participants

Identify Client

Thank Participants

**Video Lottery Players****Introduction:**

- ✱ Provide an introduction of researcher and company. The researcher/company is not connected to the client in any way. Explain the Focus Group technique, audio-taping, (and the two-way mirror). Tell the participants how and why they were selected, and that there are no right or wrong answers. We want their honest thoughts on the topic(s). Disagreeing with someone in the group is okay, but remember to respect others' opinions also. Ask them to try to speak clearly and one at a time so as not to garble the audiotape.

**Warm-Up:**

- ✱ Individual introductions of participants: first names only.
- ✱ How long have they been playing VLTs? What do they like most about playing Video Lottery?
- ✱ What types of things do they like to do when they are not playing Video Lottery? How often do they do these things?

**Part A.****1. Life Before Video Lottery?**

You have all been playing video lottery for differing lengths of time, but I would like you to think back to before you began playing video lottery. What kinds of leisure activities/hobbies did you do before you started playing video lottery?

Probe to see if they are still involved, and if not, why not?

What about other types of gambling activities? Can you recall if you participated in any other gambling activities before playing video lottery?

Probe to see if they participated in other gambling activities and, if not, why not?

**2. Life During Video Lottery?**

Are there any features with video lottery that make it more attractive to you than other forms of gambling?

What types of positive and negative impacts do you feel video lottery has had on

You Personally  
Your Family  
Your Community



I would now like you to describe for me, as a group, what someone with a very serious problem controlling their VLT play would look like.

**Briefly** probe for age, gender, level of education, marital status, where they live etc.

Okay, so we have this person who has a very serious video lottery problem. What kinds of impacts – positive or negative – does their VLT play have on their lives?

**Probe for: (and attempt to determine if any impacts would have been occurring prior to VL)**

Relationships with others? Neglecting family responsibilities to play VL?

Loss of time of work or school to play VL? Become unemployed?

Finances?

Borrowing of money? From where (Household monies, family, friends, banks, etc.)

How far in debt would they be?

Selling personal effects?

Going to food banks / attempting to obtain other types of assistance as a direct result of playing VL (Social assistance/Social Workers – even temporary)?

Stealing/trouble with the law (eg. selling drugs to play VL)?

Personal Health – inability to sleep, unhealthy eating habits, increased smoking, drinking etc.

Health System – sought assistance from counsellors, help line, attempted suicide.

#### **(Problem Players Only)**

Let's talk about you for a few minutes. You have all indicated that you have some level of difficulty controlling your video lottery play. What kinds of impacts – positive and negative – do you feel playing video lottery has had for you personally?

**Positive –** Stress Relief, escape from daily pressures

Chance to socialize with others (probe for jargon such as "hit" etc.)

**Negative –** Relationships with others? Neglecting family responsibilities to play VL?

Loss of time of work or school to play VL? Become unemployed?

Finances?

Borrowing of money? From where (Household monies, family, friends, banks, etc.)

How far in debt would they be?

Selling personal effects?

Going to food banks / attempting to obtain other types of assistance as a direct result of playing VL (Social assistance/Social Workers – even temporary)?

Stealing/trouble with the law (eg. selling drugs to play VL)?

Personal Health – inability to sleep, unhealthy eating habits, increased smoking, drinking

Health System – sought assistance from counsellors, help line, attempted suicide.

Let's say that I had trouble controlling my video lottery play, either in time, or money, or both. What kinds of things could I do to try and cut back on my play? Are any of these things that you have tried? (If yes, how often, and how successful were you?)

**3. Life After Video Lottery**

Some people think that video lottery should be removed from the province, while others think it should be up to each individual to be able to choose whether or not they play VL. How about yourselves? Do you think it should be removed or should you be allowed the choice to play?

What if today, as we speak, video lottery was made illegal? All of the machines were removed overnight from the bars and licensed lounges where they are presently. How would that make you feel?

What kinds of things would you do with the time you used to spend playing video lottery?

Probe for other entertainment options

Probe for other legal gambling – bingo, casinos, horse racing etc.

Probe for illegal gambling – illegal VLT sites, internet gambling etc.

**If not mentioned - What about the First Nations Reserves?** How many video lottery players do you think would frequent these locations reserves to play VL?

- 4.** Okay, VLTs are not illegal, but we want to make changes to the machines, locations where they are found, or anything else that might help people with problems to either eliminate or control their play. What kinds of things would we do?

Wrap-up:

Questions from Observers

Questions from Participants

Identify Client

Thank Participants

## APPENDIX D - Focus Group Participant Profiles

Halifax: Non-VLT Players				
Gender	Age	Education	Weekly Expenditure	SOGS Score
M	50	Trade School	NA	0
F	24	Completed High School	NA	0
F	48	Completed High School	NA	0
M	36	Undergraduate Degree	NA	0
F	26	Completed High School	NA	0
M	48	Trade School	NA	0
F	41	Undergraduate Degree	NA	0
F	58	Less Than High School	NA	0
Halifax: Non-Problem Players				
Gender	Age	Education	Weekly Expenditure	SOGS Score
F	47	Some College	\$10	2
F	52	Less Than High School	\$10	0
M	35	Trade School	\$5	0
M	32	Trade School	\$20	2
M	37	Undergraduate Degree	\$20	0
M	21	Less Than High School	\$15	0
M	21	Some University	\$10	0
Halifax: Problem Players				
Gender	Age	Education	Weekly Expenditure	SOGS Score
F	22	Completed High School	\$100+	15
M	33	Completed High School	\$125+	16
F	29	Completed High School	\$200+	10
M	26	Less Than High School	\$100+	16
F	56	Completed High School	\$200+	14
M	56	Completed High School	\$100+	10
M	23	Less Than High School	\$60+	14
F	57	Less Than High School	\$300	14

New Glasgow: Non-VLT Players				
Gender	Age	Education	Weekly Expenditure	SOGS Score
F	45	Trade School	NA	0
F	31	Undergraduate Degree	NA	0
F	47	Undergraduate Degree	NA	0
F	78	Less Than High School	NA	0
F	26	Less Than High School	NA	0
F	69	Completed High School	NA	0
F	37	Less Than High School	NA	0
M	50	Trade School	NA	0
M	55	Undergraduate Degree	NA	0
M	35	Trade School	NA	0
New Glasgow: Non - Problem Players				
Gender	Age	Education	Weekly Expenditure	SOGS Score
F	23	Less Than High School	\$10	0
M	20	Trade School	\$10	0
M	19	Trade School	\$10	0
M	29	Less Than High School	\$20	0
M	29	Completed High School	\$20	0
M	55	Trade School	\$15	0
New Glasgow: Problem Players				
Gender	Age	Education	Weekly Expenditure	SOGS Score
M	67	Less Than High School	\$100+	10
F	19	Completed High School	\$80+	14
F	27	Less Than High School	\$200+	10
M	22	Completed High School	\$100+	11
F	19	Some University	\$50+	16
F	19	Completed High School	\$150+	14
M	45	Less Than High School	\$100+	10
F	38	Some University	\$400+	10
M	29	Completed High School	\$150+	14



# Appendix I



**REVIEW OF THE PORTER DILLON STUDY:  
SOCIOECONOMIC IMPACT OF VIDEO LOTTERY  
TERMINALS**

**PREPARED FOR  
ALCOHOL AND GAMING AUTHORITY  
NOVA SCOTIA**

**BY  
MPM GAMING RESEARCH**

**JULY 1999**

## **TABLE OF CONTENTS**

### **INTRODUCTION / 3**

(a) Background /3

(b) Purpose /3

(c) Report Organization /4

### **OVERVIEW OF PORTER DILLON REPORT FINDINGS /4**

### **EVALUATING RESEARCH METHODS AND KEY ASSUMPTIONS /14**

(a) Overall Research Design /14

(b) Economic and Social Impacts /20

(c) Behavioral Assumptions /21

### **EVALUATION OF ECONOMIC IMPACTS (Section 5) /23**

(a) Economic Impacts (Section 5.1) /25

(b) Fiscal Impacts of VLT Gaming (Section 5.2) /31

(c) Economic and Financial Costs (Section 5.3) /33

(d) Distributional Impacts of a VLT Ban (Section 5.4) /40

### **APPLICATION TO OTHER GAMBLING RESEARCH /41**

### **BIBLIOGRAPHY /47**



## INTRODUCTION

### (a) Background

On June 28, 1998, the Nova Scotia legislature passed Bill 17 entitled "The Video-Lottery Terminals Moratorium Act," which restricted the number of video lottery terminals (VLTs) in Nova Scotia and mandated a socioeconomic impact study of this form of gaming. Porter Dillon and Sterling Research were selected to undertake this study. Their objectives as stated in the terms of reference were "to assess the social and economic implications of VLT gaming on Nova Scotians" and to assist the all party committee (i.e., the standing committee on community services) to determine "if, after considering the positive and negative impacts, VLT gaming in particular exceeds the limits of social acceptability in Nova Scotia." Porter Dillon and Sterling Research commenced their work in January 1999 and filed their final report entitled *Socioeconomic Impact of Video Lottery Terminals: Final Report* (Porter Dillon study) in May of that year.

### (b) Purpose

The purpose of our review is to provide a comprehensive examination of the Porter Dillon report under the auspices of the Alcohol and Gaming Authority so that they can determine the value of this study's approach for future gaming research. To that end, this report will: (a) provide an overview of the

findings of the report entitled *Socioeconomic Impact of Video Lottery Terminals: Final Report*; (b) appraise the assumptions and indicators underlying the research results; (c ) determine the validity and reliability of the methodologies and estimates derived; and (d) discuss whether this analysis can be replicated for other types of gambling such as lotteries, bingos and casinos.

### **(c) Report Organization**

In the first section of this review, we summarize the key findings of the Porter Dillon study and discuss how they arrived at their conclusions. Next, we identify and articulate the underlying assumptions and principles that guided their research and methods. Then, we appraise the methodological foundations, evaluate the operational indicators, and discuss the validity and reliability of their techniques with an eye towards determining the replication potential of this type of research. In particular, we de-construct the logic and sources that were used to estimate the social and economic impacts of VLT gambling. Finally, we determine whether these projected techniques are valid and have wider application.

## **OVERVIEW OF PORTER DILLON REPORT FINDINGS**

Porter Dillon and Sterling Research conclude that the VLT issue in Nova Scotia is immensely complicated. They had considerable difficulty judging the harm, moral significance, and policy consequences of VLT gaming. Their

report did not contain specific recommendations to the government, and they offered little definitive guidance concerning further restrictions or an outright ban on these electronic devices. In the final analysis, the Porter Dillon study was silent on specifying the limits of social acceptability for this type of gaming in the province, although it was within their mandate to do so. While they speculated on the costs and benefits of further restrictions and bans, they concluded that the weighting of these positives and negatives was "a matter of judgment based on the values of Nova Scotians which, we feel are best interpreted by elected legislators."

The Porter Dillon report, however, does contain many important and interesting findings as listed below:

(1) The debate over VLT gaming in the province is vociferous. Opponents of VLTs state that this type of gambling fits perfectly with the "obsessive-compulsive" tendencies of problem gamblers. From this perspective, VLTs are perceived to have little entertainment value and to be responsible for a multiplicity of social problems. Proponents of VLTs, however, contend that legalization provides security and safety of play and payouts for consumers, employment opportunities for the economy and tax revenues for government. VLTs are perceived, in this perspective, to be a "consumer choice " and opportunities should not be denied because a minority of players cannot adequately control their gambling.

(2) According to the Porter Dillon study, current and potential responses to VLT gaming are many, varied, and difficult to assess. They include restrictions, moratoriums, machine re-engineerings, site modifications, information research, training, education and public awareness programs, health counselling measures, and possible bans. Nevertheless, despite these many problem gambling persists and so the question remains: are these government responses adequate to control the "dark side" of VLT gaming?

(3) The Porter Dillon study utilized a focus group research technique for obtaining data on social impacts. This research strategy was based on a study of six groups - three in Halifax and three in New Glasgow. These focus groups were divided into three categories: non-VLT players, regular non-problem players and problem players. A basic finding was the absence of any consensus concerning a VLT ban in the province. According to the Porter Dillon study, non-VLT players would be largely unaffected by a ban; regular non-problem players would shift their gaming to other forms of entertainment, including other types of legal gambling; and problem players would continue to gamble elsewhere and/or illegally.

(4) The Porter Dillon study conducted focus group research and found that:

- (a) non-VLT players, both urban and rural, identified many **positive individual** impacts associated with this type of gambling such as excitement, escape from routines, entertainment, socialization opportunities and financial gains. Non-problem urban, VLT players mentioned wins, excitement,

entertainment and relaxation as positive individual impacts, while rural non-problem VLT players emphasized socialization and the rewards of passing time as primary benefits of VLT play. Problem urban and rural VLT players stressed winning as the most beneficial individual impact, and rural problem VLT players also mentioned the opportunities for conviviality and escape from tedious tasks as secondary positive benefits arising from VLT gaming;

- (b) urban non-VLT players identified relief from family pressures and the enjoyment of shared winnings as positive **family** impacts of VLT gaming, while rural non-VLT players emphasized more the benefits of stress relief, family socialization and additional family consumer purchasing power. Non-problem VLT players, both urban and rural, stressed the positive value of 'shared' winnings for the family, with rural non-problem VLT players also catalogued fun, entertainment and tension release and escape as positive family benefits arising from this form of gambling. Problem urban VLT players related no positive family benefits, while rural problem VLT players mentioned occasional 'shared' winnings as positive impacts; and,
- (c) non-VLT players, non-problem VLT players and problem VLT players, both urban and rural, identified tax revenues as the primary positive **community** impact emerging from this type of gaming, although all rural respondents added that the real revenue benefits were mostly for *local* services and businesses.

(5) With respect to perceived **negative** impacts, the focus group findings of the Porter Dillon study reveal the following:

- (a) urban and rural non-VLT players perceived few negative **individual** impacts other than time loss and possible addiction to the game for problem players. Non-problem players, both urban and rural, perceived money and time losses as the major negative impacts on individuals. Problem urban and rural players, on the other hand, catalogued a long list of negative impacts of VLT gambling including indebtedness, psychological disorders, health problems, work-related difficulties and legal costs;
- (b) interestingly, negative **family** impacts were not perceived to be as serious as individual impacts. Urban and rural problem players were unable or unwilling to identify family consequences arising from their VLT play, other than to mention the occasional divorce and a moderate measure of family stress. Non-problem players, both urban and rural, saw financial consequences as the major negative family impact of VLT play. Non-players from urban and rural settings, however, perceived many more negative family impacts than did either non-problem or problem players. For them, loss of family income, loss of time spent with family members and loss of family respect along with breaches of trust were pervasive negative impacts of VLT gambling; and
- (c) as players became more committed they were less likely or willing to identify negative **community** impacts, although their comments sometimes

alluded to them. Problem urban and rural players saw no negative community consequences to their play and provided little useful data, perhaps, because the topic was too sensitive or too embarrassing. Non-problem players also saw few, if any, negative community impacts emerging from VLT gambling. Urban players identified welfare costs to the community and lost productivity at the workplace as possible impacts, whereas rural ones mentioned potential neighborhood crimes and costs to the business community. Neither rural or urban players felt strongly about these social impacts. Urban non-players perceived very few negative community impacts deriving from VLT play, but participants in the rural group cited social assistance costs, counselling costs, work related costs, bankruptcy and increased crime as possible results of problem VLT play.

(6) The Porter Dillon study probed the VLT ban issue and found that focus group participants were evenly divided about its merits. Non-VLT players listed eliminating addiction, preventing youthful gambling, reducing overall social system costs and minimizing government exploitation of gamblers as benefits of a ban. Problem players who favored banning VLTs offered personal reasons for doing so. They felt it was needed to restrain their uncontrolled play! Non-VLT players, non-problem players and even problem players who opposed bans did so because, in their opinion, bans violated personal choice and personal responsibility. Furthermore, problem players claimed that banning VLTs would

create an illegal underground economy for these machines and would not eliminate the problem of persistent VLT gambling in the province.

(7) The Porter Dillon study also used the focus group research technique to explore the relationship between machine characteristics and problem play. An almost unanimous conclusion from all participants in their study was that “bonus” credits contributed to chasing losses. Two recommendations were suggested by focus group participants: (a) more restrictions on access hours of play and (b) the institution of a “pause mechanism” on VLT devices that would allow players to stop play, assess their losses and cash out.

(8) The Porter Dillon study, in evaluating annual government gaming reports and statistics, previous CANMAC impact studies and the Nova Scotia Video Lottery Players Survey 1997-98 (Nova Scotia Department of Health Problem Gambling Services and Focal Research) concluded that VLTs in the province of Nova Scotia are not a source of export revenue. Using an incremental impact estimation approach, they further found that banning VLT use would little contractionary effect on the economy. The impact of a ban on casual VLT players (who account for about \$3.5 million in net VLT expenditures and whose play is part and parcel of other social activities) is estimated to be negligible. According to Porter Dillon, the impact of a ban re-distributes the economic activity but not the total amount of activity. Regular non-problem VLT players (who account for \$51.5 million in net VLT expenditures and whose play is more persistent and diverse than non-VLT and casual VLT players) also would not be



seriously impacted by a ban. These players would likely divert their expenditures to other legal gaming activities and thus there would be no import leakage and little change in the overall economic impact on the economy. Regular problem VLT players (who account for \$62.1 million in net VLT expenditures, who wager approximately \$800 per month and who are committed gamblers) would be moderately affected by a ban. Porter Dillon estimates that the leakage of expenditures from Nova Scotia will not be large. Problem players will likely redirect their expenditures to other forms of legal gaming in the province, to illegal VLT play and possibly to out of province gambling VLT locations. While this may reduce some spending inside Nova Scotia, the net economic impact is estimated to be minimal.

(9) The Porter Dillon study, in analyzing information provided in the *CANMAC Nova Scotia VLT's An Economic Impact Statement* report and in the Nova Scotia Alcohol and Gaming Authority Annual reports, estimates that the total household income impact on \$121.1 million in net VLT expenditures diverted to other forms of gaming and leisure activity will be approximately \$37.3 million. Proportionately this is approximately 10 percent less than the household impact of the same expenditures on VLTs. On this basis, household income in Nova Scotia would be reduced by \$3.9 million (\$41.2 million minus \$37.3 million) if VLTs were eliminated and this would translate into approximately 150 full-time equivalent jobs lost.

(10) VLTs are the most efficient of all gaming activities in raising revenue for governments. According to Porter Dillon results, a ban will not result in revenue loss on a one-to-one basis. Money currently spent on VLT play by all players will be diverted to other economic activities that are taxed resulting in an estimated loss of \$57.1 million of the current \$80.4 million in revenue to the provincial treasury. This is the total incremental government fiscal impact based on the diversion of \$121 million in net VLT expenditures to other forms of gaming, entertainment and leisure activities.

(11) The social costs associated with VLT gaming are difficult to define but nevertheless they translate into considerable economic losses. The Porter Dillon report uses the 1997-98 *Nova Scotia Video Lottery Players Survey* and figures cited from a 1995 U.S. study entitled *The Social Costs of Gambling in Wisconsin* and a 1995 Canadian study entitled *An Analysis of the Net Social Benefits from legalized Gambling in the Province of Manitoba* to estimate societal costs for gambling in Nova Scotia. They calculate that 6,400 problem VLT players in Nova Scotia in 1998 generate economic costs of approximately \$74.2 million, or \$6.2 million less than the gross government revenue obtained from VLT gaming operations. Their figure is based on a projected annual cost per problem gambler of \$11,600 and includes costs such as: lost productivity, personal bankruptcy and problem player rehabilitation costs. Porter Dillon admits that this is a rough estimate. They do not have the data to state definitively the quantity of these costs in Nova Scotia.

(12) The Porter Dillon study concludes that a ban or further restrictions on VLTs will impact differentially on specific interest groups resulting in both positive and negative consequences. A ban on VLTs will probably benefit suppliers and operators of illegal machines, assist First Nations reserves who are predicted to expand their legal VLT operations to the maximum allowable, and the operators of other legal forms of gambling. Contrarily, if VLTs are banned, existing legal suppliers and licensed operators and establishments (i.e., restaurants, bars, taverns, service clubs, etc...) will be negatively impacted, and some may be forced to go out of business. However, according to Porter Dillon, spending on VLTs does not account for any new spending in Nova Scotia, thus the net impact on these businesses will be balanced by benefits that will be re-directed to other sectors of the Nova Scotia economy.

While these findings are interesting and important, it must be said that the Porter Dillon study is a rather derivative research project. The only original research conducted was a focus group study which the authors admit does not yield quantitative findings applicable to a larger population. No local social cost study was available or undertaken for purposes of assessing the socioeconomic impacts of VLTs. Instead, the Porter Dillon study extrapolated assumptions and data from existing research, mathematically inferred specific results to the wider population and drew conclusions about economic impacts, fiscal impacts and economic and financial costs of VLT gambling.

This noted, however, the Porter Dillon study has amassed relevant information on VLT gambling, organized the shards of information into a presentable format, documented some of the implications of banning (or not) VLTs and generated some controversial social and economic impacts. Overall, the Porter Dillon study raises some important empirical questions, maps an exploratory strategy for quantifying impacts and economic costs, and provokes further discussion and debate about the role of VLTs in Nova Scotia society and the best ways to study their social and economic impacts.

In that regard, our review raises the following questions. How valid are its underlying assumptions and methodology? What behavioral assumptions are made and are they justified? How reliable are the parameters used to estimate overall economic impacts, fiscal impacts, and the costs of VLT gambling in the province? Can their research strategy and techniques be replicated for other types of gaming?

## **EVALUATING RESEARCH METHODS AND KEY ASSUMPTIONS**

### **a) Overall Research Design**

The Porter Dillon report makes a number of key assumptions concerning research strategies and techniques. First, they design the socioeconomic impact study in a manner which combines qualitative, focus group based research with a quantitative, incremental economic impact model. On the surface, this seems to be a sensible and heuristic research plan since

qualitative data can inform quantitative analysis and may corroborate certain research projections and speculations. The problem, however, is that these are rather distinct research techniques. The former is especially exploratory, subjective and quite limited in its application. Findings cannot reliably be projected onto larger populations, as the authors of the Porter Dillon study themselves note. Nevertheless, and notwithstanding the interesting comments of focus group participants and the helpful analytical summary provided by the authors on the positive and negative social impacts of VLTs (in Section 4), one has the impression that the incremental economic impact analysis findings (in Section 5) could have been derived without reference to the earlier focus group study. The former research technique does not seem to be crucially necessary for the success of the latter economic analysis. Indeed, the assumptions that underlie the incremental impact analysis are mostly connected to a reexamination of the 1997-98 *Nova Scotia Video Lottery Players* survey (Focal Research), the *CANMAC Economic Impact* report and government statistical data and reports. It is not readily apparent why Porter Dillon embarked on this particular research design, especially since there was a considerable archive of existing local focus group findings available to inform them about positive and negative social impacts and since the qualitative data does not, for the most part, inform their estimated impact projections and economic and financial costs. In fact, as we argue below, insights from the focus groups were sometimes ignored in the

quantitative analysis. There seems to be little "pay-off" resulting from combining these two research techniques.

Second, the Porter Dillon study makes the assumption that reliable province-wide socio-economic impact and social cost data can be derived by borrowing and re-working existing surveys, impact studies and cost estimate analyses. Without doubt there is a certain utility and benefit to this kind of research approach, especially where the objectives of the research are investigative rather than definitive and where there is a paucity of local research knowledge. This is also a common practice in socio-economic impact research.

There are, however, serious limits to this derivative approach. Firstly, economic impact estimates tend to *uncritically* replicate earlier figures from previous studies. For example, Porter Dillon estimates the number of problem gamblers at 6,400 as reported in the Focal Research final report. Porter Dillon does not provide a convincing rationale for accepting this figure other than that they have confidence in the Focal Research players survey and findings. Nor do they discuss the methodological basis for their confidence in this figure. They simply accept it at face value! But Focal Research findings about the number of problem gamblers in the province, it must be said, were based on a *telephone* player survey and a *telephone* population survey which allowed respondents to *self select* their membership in the problem VLT gambler segment.

These telephone and self-scoring techniques are not free of methodological problems. The use of telephone surveys, although popular and

frequent in gambling research, have been severely criticized by leading authorities in the field. While they are expedient, increasingly up-dated and cost efficient, they are notoriously weak in providing accurate information on sensitive topics such as religious and political beliefs, and personal health problems. With regard to problem gambling research, Walker (1992), Thompson, et al. (1996) and Dickerson (1993) note: (a) that telephone surveys are unlikely to capture problem gambler respondents very easily or effectively; (b) that problem gamblers are more likely not to be at home for research purposes; (c) that problem gamblers are more likely not to have telephone services because they are often unable to pay their telephone bills; (d) that problem gamblers are more likely to screen their calls because they are evading creditors and are suspicious of anonymous callers desiring to ask them questions; (e) when problem gamblers are at home and not alone and do take a researcher's telephone call, they are reluctant to divulge reliable information about their problem gambling in front of family members or friends; and (f) if they feel free to converse, they are still likely to lie about their gambling problems.

Self-selection techniques were also at the core of Focal Research's identification of the problem gambler segment of the VLT players survey. In addition to a derived multi-item attitude score of 16+ on six key statements associated with problem VLT gambling, Focal Research also used two self designated scoring systems as independent measures. Respondents had to qualify on two of the three measures before being included in the problem VLT

gamblers segment. The underlying rationale for this approach was "that regardless of the tendency for an individual to be involved in (or to report honestly on) specific behaviors demonstrated to be associated with problem gambling, the subjective experience of the individual in terms of their gambling will be an important indicator of those who are experiencing difficulty in managing or controlling their VLT gambling (Focal Research, 1999:3-2)." This means, they say, that those who "feel" their VLT play is problematic should be considered in an analysis of problem play "regardless of their qualifications on other behavior or attitudinal measures." By our calculations, almost one in four problem VLT players in the players survey were assigned this status on the basis of self selection measures.

These research techniques and procedures raise some serious methodological questions about the problem VLT player category: (1) Did the telephone survey method underreport the numbers of problem VLT players in the province? (2) Conversely, did the reliance on self selection measures inflate the numbers of problem gamblers in their sample? (3) Given the answers to one and two, who, then, are the real problem VLT gamblers in Nova Scotia? (4) Since they rely on self selected subjective data, how do we independently corroborate the validity of Focal Research's claims concerning the problem VLT gambler segment? In our opinion, the methodological basis for accepting the numbers of problem VLT players is not obvious or certain and Porter Dillon



should have been much more cautious in using this figure of 6,400 problem players in their calculations.

In addition, the Porter Dillon report confuses other categories of players identified in the original Focal Research study. While they replicate the category of non-VLT players from the Focal Research study they actually combine "casual" and "regular" players, both infrequent and frequent, into a single new category called "regular non-problem players." Regular non-problem players, according to Porter Dillon, now incorporate those who play occasionally, less than once a month, those who play infrequently, three times per month or less and those who play frequently, four or more times per month averaging at about 7.2 times per month (Focal Research, 1998:3-3). This category of "regular non-problem player" has become so vague and nebulous that it problematizes what constitutes the definition of "regular" and what constitutes the definition of "non-problem." If the authors of the Porter Dillon report believe that the findings of the Focal Research study are "unique and reliable," why then manipulate and alter the very categories that generated their trust in them? We can see no reason for doing this since the original categories are more discriminating, refined and logical than the revamped ones. By arbitrarily flattening out unique and distinct categories and characteristics of players, the Porter Dillon study calls into question the very subjective and objective basis of the players' experiences that led to the original classification. In turn, this raises very difficult and important questions about replicating definitions, methods and findings, especially since

the Porter Dillon study uses the regular non-problem player category in their economic impact assessment.

#### **b) Economic and Social Impacts**

The Porter Dillon report includes little discussion of the similarities and differences in social and economic impact analysis and the literature which applies this to gambling. The approach to socio-economic impacts taken in this report is not very subtle or innovative in this regard. Their primary focus is on a macro-level analysis of economic impacts. That is total spending levels in the economy, rather than the distribution of that spending, were what mattered most. From this point of view, it is not important who spends the money, or on what, but simply what are the net additions or net reductions in economic activity. But, in fact, distributional issues are a key part of social impact analysis.

At a more micro level, the social harm done to some people matters, even if benefits accrue to other members of society. It is possible and desirable to quantify the relative size of economic spin-offs from different industries while recognizing, at the same time, that positive spin-offs from an economic point of view (jobs in counseling) may represent a cost in social terms.

There are important debates in the social impact literature which are ignored in the Porter Dillon study. In conceptualizing social costs some researchers include the harm done to individual gamblers by their gambling - their personal job loss, indebtedness, and emotional welfare. Other researchers limit social costs to the costs gamblers impose on others in society - legal costs,

health costs, criminal justice costs. In examining social costs of problem gambling it is also important to distinguish between costs to society and costs to government. Furthermore, when benefits and costs are combined, the net benefits to government should be distinguished from the net benefits to society. Families and communities may bear many of the costs of problem gambling while government may reap the revenues.

Given the complexity of social and economic impact analyses and the perspectives which can be taken, it is vital that studies such as Porter Dillon, clearly specify and justify what impacts, costs or benefits they have included and why.

### **c) Behavioral Assumptions**

Finally, the Porter Dillon study makes certain key behavioral assumptions about how different types of players will respond to a possible ban on VLT play. These behavioral assumptions drive their cost estimates in section 5. While it is important to disaggregate gamblers according to types and to recognize substantial differences among them, it is equally important to connect the classification of gamblers to a set of clear and precise behavioral outcomes. The conclusions drawn in section 5 of the report concerning the behavioral responses of each gambling group to a ban are vague and, in some instances, contradictory to characterizations made earlier in the report. The bottom line

assumption used in the report is that spending on gambling and related leisure products and services will be essentially unchanged.

Casual players, who were absent in the classification schema of the focus group analysis of the report, are suddenly and opportunistically resurrected in the economic impact analysis of VLT use (section 5). It is assumed that they would redirect their VLT spending to "other forms of legal gambling and leisure." Regular non-problem players, who once included casual players and now it seems do not, would divert their VLT expenditures to "other legal gambling activities." This assumption is based on evidence that suggests that regular players engage in a range of other gaming activities. However, there is no basis for assuming that these players have "a gaming budget" that will be spent on whatever game is available, or indeed, that casual players have a fixed "leisure-gambling budget." Evidence presented elsewhere in the report indicates that money devoted to gambling has grown in response to an increase in available and accessible gambling products which are not necessarily substitutes for each other (Marfels, 1997). In our view, the case has not been made convincingly that regular non-problem VLT players will continue to spend the same amount of money on gaming and/or leisure products in the absence of VLTs. Leisure activities have a time as well as a money dimension, and not all time spent in leisure has the same dollar cost.

Regarding problem players, Porter Dillon makes the behavioral assumption that these players will continue to spend the same amount of money

gambling, some legally and some illegally. Again this is a strong and contentious assumption. Many players in the focus group interviews indicated a desire to stop playing so intensely. They admitted that they wagered excessively and that their gambling was directly correlated to the availability of the product. While many problem gamblers said that they would feel compelled to keep gambling, it seems too strong an assumption to claim that a ban would have no impact at all on spending levels. Indeed, as the Porter Dillon report itself acknowledges, there would be a reduction in the numbers of people who develop gambling problems and so, over time, expenditures would likely decline.

We are not convinced, in the final analysis, that the dollar value of VLT spending would simply transfer to gambling or related leisure spending. The empirical basis for this assumption seems weak and unfortunately it drives many of the empirical dollar results of the Porter Dillon study. As we shall see below, if even some of the money is diverted from gambling into savings, debt reduction or other forms of spending, the economic impacts will vary accordingly.

## **EVALUATION OF ECONOMIC IMPACTS (SECTION 5)**

Taken together, then, our appraisal of assumptions and research methods raises questions about the values used for various parameters in the economic estimates provided by Porter Dillon. The Porter Dillon study begins its evaluation of economic impacts of VLT use (and removal) with a summary of the growth of VLT expenditures from 1997 to 1998. In 1998 total VLT wagers

stood at \$404.7 million, of which \$121 million was net of prizes paid (these are credits actually cashed out, not replayed). In other words, VLT players put in \$121 million more than they took out of the machines. They use this 'net expenditure' in their analysis. Is this the proper figure to use for 'spending' on VLTs? If \$404 million is spent on movies, that money is gone from consumers' hands in that spending round. When consumers purchase VLT play, they get entertainment, and a chance to win money. The \$283.8 million in prize money cashed out is in fact part of the product, but this money is available for other kinds of spending, thus only the 'net expenditure' is assigned to VLTs. The total VLT wager grew by only 8 percent in 1997-98, compared to an increase of 28 percent in the casino wager and 11 percent in overall wagers. However, the net VLT expenditure grew by 13.9 percent, which may reflect less cashing out of prize money.

While net expenditure is the proper figure to use for measuring spending on VLTs, the overall economic impact may also be affected by the distributional shifts which occur from winners to losers. For example, I may use \$10 of my 'entertainment' spending on a VLT, and walk away with \$100, which other consumers willingly spent on VLTs, which I put in my saving account - thus removing that \$100 from the spending flow. To the extent that the VLT winnings are re-spent, the distributional effects are of little relevance; however, if the transfers are from spenders to savers, or vice versa (problem players incurring negative savings, while winners spend the money), the effect will be

contractionary (or expansionary). In fact, relatively little is known about the use of winnings from VLT play, or other gambling activities. Given the Focal Research study estimates that problem players contribute 53 percent of total VLT gaming revenue in Nova Scotia, and tend to spend their savings and their winnings, the net impact is likely expansionary.

#### **a) Economic Impacts (section 5.1)**

In assessing overall economic impacts, the Porter Dillon study makes the important distinction between gross impacts associated with an activity, and net impacts. Thus, while gambling creates jobs and revenues (gross impacts), how much of this is above and beyond what would otherwise have been created (by alternative uses of the money)? As argued in reverse in the Porter Dillon study, if VLTs are banned, many of those dollars will be spent on other products offsetting the job and revenue loss related to VLTs. The Porter Dillon study attempts a net impact analysis by evaluating the likely spending choices of players in the absence of VLTs. While this methodology is fine, there are major problems in the estimations. The risk is to turn the exercise into a tautology where everything that would have been spent on VLTs is spent on other products, leaving the level of economic activity unchanged.

In considering the impact of those redirected dollars, economics points to two key issues. First, at the macro level what matters for overall economic activity is the extent to which income re-circulates, creating further rounds of economic activities (the multiplier effect). The Porter Dillon study correctly

draws attention to one important source of 'leakage' from the flow - money flowing out of the province. They argue that VLTs do not attract money into the province (i.e., from tourists), nor will VLT players take their money outside of the province to gamble in the wake of a ban on VLTs. They also pay some attention to tax leakages in their discussion of government revenue implications (they would decrease, since the government's share of VLT spending is higher than its share of other consumer spending). This would make the removal of VLTs expansionary (though in the current fiscal climate tax 'leakages' are totally offset by government spending 'injections'). The Porter Dillon report, however, pays no attention to the third major 'leakage', which is savings. They assume throughout that every dollar now spent on VLTs will be spent on other forms of gambling or other consumption. This is likely true for casual and regular players, for whom VLTs are one of many possible entertainment options. However, as entertainment takes time as well as money, it is possible that alternative entertainment choices will involve less spending. As for problem VLT players, who contribute the bulk of the revenues, even the evidence cited in the Porter Dillon report suggests that many are dis-saving. If at least some of them regain control of their gambling as a result of a ban on VLTs, the effect will be to dampen spending.

There is simply not enough empirical evidence to know how this money will be redirected. In our earlier report we recommended a consumer expenditure study to better understand the relationship of gambling to other expenditures,



and to savings (debt). In the absence of such research, it is not clear how VLT players will use the money now directed toward VLTs.

The second economic issue is the more micro-level issue of input-output relationships and consequent economic spinoffs from one industry to others. If one knows how demand changes in one sector the impacts can be traced through to other sectors and consequently to overall economic impacts. Industries differ in their backward and forward linkages, especially in a provincial context, affecting ultimate income generation and employment effects. Presumably consumer dollars spent on gambling will have different economic impacts than the same dollars spent on food, or house construction, or theatre. Indeed, dollars spent on VLT play may have different economic impacts than if the same dollars are spent on other forms of gambling.

In deriving their estimate of the impact of a ban on VLT play, Porter Dillon use the CANMAC results for the multiplier effect of VLTs, which estimated the direct, indirect and induced income generated to be \$35.9 million in 1997, for \$99 million in net VLT wagers. While the CANMAC methodology is not spelled out, it appears to be based on standard input-output approaches to economic impact analysis described above. They use operator revenue to estimate direct impacts, assuming VLTs are 'gravy' to the restaurant/lounge business. Indirect impacts are limited to the inputs to the Atlantic Lottery Corporation and the income it directly generates. The induced economic impacts are the incomes generated in the subsequent rounds of spending (we are not in a

position to evaluate the data used to generate this figure). The methodology is standard. It should be noted that the calculation of indirect impacts would be hard to make for a type of gambling such as bingo, which does not have the same single provider.

Assuming the CANMAC parameter estimates are reasonable, is the Porter Dillon application of them valid? We find several problems with the application. One detail of the CANMAC procedure which is overlooked is that CANMAC excludes charity and First Nations revenues from the calculation, therefore the \$35.9 million impact is based on a \$99 million net wager, not \$105 million, as the Porter Dillon report states. This raises the implied multiplier from .34 per dollar spent to .36 per dollar spent. Another problem is that the Porter Dillon estimation is based on the assumption that all VLT money (\$121.1 million) is redirected to other gaming activities (which, as noted above, is a stronger assumption than their discussion of the players' behavioral responses warrants).

Porter Dillon's economic impact estimates are based on figures in Table 5-2, which generates the relevant expense and revenue distribution by deducting VLTs from the totals. However, we believe that there are errors in the table. The amount for 'other' operating expenses should be \$95 million, not \$261 million (\$104.4 million total - \$9.4 million for VLTs). The net wager revenue for 'other' should thus be \$192.9 million, not \$358.9 million. The last column in the table also has to be adjusted, reading down, to 49 percent (operating

expenses), 9.6 percent (revenue to charities), 10.6 percent (revenue to commercial entities) and 30.5 percent (revenue to the province).

It should also be noted that the interpretation of these items differs for different types of gambling, according to the AGA Annual Report (1997). For example, operating expenses are broken out from revenues for charitable bingos, but not for commercial bingos. Furthermore, the income guarantee which goes to the province from the casinos is included in operating expenses, not government revenues. As these examples indicate, the interpretation of these economic impact figures has to be done with extreme care. Using the aggregate 'other' figures masks the way both measurements and impacts differ across gaming venues. None of these issues are made transparent in the Porter Dillon report.

What happens, then, if \$121 million is spent on other gambling? CANMAC's \$22.8 million estimate for direct impacts was based on the fact that restaurant and lounge operators had minimal expenses, so this was in effect their net revenue (income generated). It is not clear that the same assumptions are valid for all types of gaming (except perhaps other lottery products). Porter Dillon, nevertheless, take 5.7 percent (revenue to commercial entities) of \$121.1 million to get the equivalent direct impact (\$6.9 million). However, as noted above, the actual percentage should be 10.6 percent, which throws off this calculation by almost \$6 million. Porter Dillon use the operating expenses figure and the revenues to charities to estimate the indirect impacts, however, we are unable to determine how they arrived at the \$18.6 million figure, using

CANMAC's approach. Furthermore, the CANMAC number was based entirely on an estimate of income and employment effects resulting from Atlantic Lottery Corporation expenditures, which may differ for the suppliers of other gaming products. In fact, one could argue that revenues to charities is parallel to revenues to commercial entities and should be included in direct, not indirect impacts. Making this adjustment, and using the correct ratio, would increase the size of the economic impacts.

The final component in the economic impact formula is the induced household spending, for which Porter Dillon do not provide a methodology. They do, however, seem to apply the same ratio of induced spending to direct plus indirect spending as is implied by the CANMAC results. In other words, a standard multiplier is used in the Porter Dillon report.

Overall, then, we find problems with these impact estimates, both in whether the CANMAC assumptions for VLT impacts can be so readily transferred to other gaming activities, and in the actual mechanics of the calculations. Furthermore, as noted at the outset, this estimate assumes all current VLT money is redirected to other gaming, which Porter Dillon's own evidence does not support. In the final component of this exercise, the money estimated to be diverted to First Nations VLT play is separated out and the original VLT impact formulas are applied to that \$20.7 million. However, it is important to remember that CANMAC's own estimates explicitly excluded First

Nations revenues, and it is not clear that their VLT impact formula can be so easily transferred, without modification, to that activity.

#### **b) Fiscal Impacts of VLT Gaming (Section 5.2)**

Section 5.2 of the Porter Dillon report considers the fiscal impacts of VLT gaming pointing out, correctly, that VLTs are the most efficient gaming activity in raising revenue for the province, and return a higher share to the government than personal income or sales taxes. Thus, as they argue in section 5.2.2, even if a VLT ban had little impact on economic activity overall (based on their assumption that all money would continue to be spent on related products), it would, nevertheless, cause a loss of revenue to the province.

But it should be noted that the figure of \$.16 of each net dollar wager on 'other' gambling going to the government is based on the wrong figures in Table 5.2. The correct percentage is \$.31. This error affects the estimates of the impact on government revenues if VLTs are banned (pages 66-7). The decline would not be as precipitous as indicated, since the correct percentage of net wager from 'other' gambling' which goes to the government as revenue is 30.5 percent, not 16.4 percent. These estimates should be adjusted for this error. The estimates of total direct fiscal impact (section 5.2.3) are thus overestimated. Furthermore, the incremental direct, indirect and induced fiscal impacts presented in section 5.2.4, which are based on the replication of the CANMAC

economic impact results, are also inaccurate, given the methodological problems noted earlier.

The conclusion arrived at in section 5.2.5 indicating a net loss of government revenues of \$57.1 million is thus unreliable and likely an overestimation, since the differences in rates of government revenues and the share of operating costs for 'other' gambling as compared to VLTs are wrong - the effective tax rate on 'other' gambling is higher than stated and the share of operating costs is lower.

The fiscal impact results are also based on the assumption that all money would continue to be spent on gambling products which, of course, is debatable. Therefore, a more accurate estimate would have to take account of changes in spending patterns. For example, what share of net wager money would be spent on various gambling products (ideally broken down by type of gambling)? What share would be spent on items for which sales taxes are paid? What share would be saved?

The Porter Dillon report also comments on the issue of the regressive character of the VLT 'tax'. Based on findings from the Focal Research study, they argue that at least casual and regular players are representative of Nova Scotia household income profiles. Unfortunately, as they note, they are unable to compare the income profiles of the problem gamblers, who contribute 53 percent of VLT expenditures, with the profiles of the general population. Thus, little can be concluded about regressivity from this data. The gambling literature,

however, is fairly consistent in finding that raising revenues from gambling is regressive compared to other taxation schemes. In our report (MPM Gaming Research, 1999) we recommended an analysis of household income and expenditure data to shed more light on this important question. Our review of this study convinces us that the need is greater than we had initially assumed.

### **c) Economic and Financial Costs (section 5.3)**

There have been many studies which have tried to give a precise measure of the dollar value that one problem gambler costs society. These studies have used different definitions and methodologies in calculating their costs, although details of their measurements have often been lacking. The variation of dollar figures ranges from a low of \$6,000 to over \$60,000 per year per problem gambler (Politzer, Morrow & Leavey, 1981; Kindt, 1994; Meyer, Fabian and Wolfgang, 1995; Lesieur, 1996; Meyer, 1996; Thompson, Gazel & Rickman, 1996). Other studies have tried to calibrate a *total* societal cost of gambling, usually by multiplying costs associated with one problem gambler by an estimate of the total number of problem gamblers (Lesieur & Puig, 1997; Thompson, Gazel & Rickman, 1996, 1997; Cyrenne, 1995; Thompson & Gazel, 1998).

The conceptualization and measurement of social costs is complex, and researchers have offered different approaches. Some analysts argue that social costs are cost transfers from one individual who is gambling to others who are

not involved in gambling. They claim that some social cost items such as broken families and suicides related to problem gambling are so intangible that a dollar figure cannot be placed upon them. These social costs cannot be easily fitted into models of economic costs designed by economists. On the other hand, monies that have to be expended on police resources and on the judicial system because of the criminal activity of problem gamblers do result in individual and collective losses for everyone in a society. As Thompson and Gazel (1998:2) remark "they are both economic costs for society and social costs for a society." From this perspective, then, a definition of social costs must include things like theft, fraud and embezzlement which result in a redistribution of wealth to other people who have not been willing partners in the said activities, even though the value of the appropriated goods or monies remain in the community and the community has not incurred a net loss (Thompson & Gazel, 1998:3). This means that a refined social cost analysis must be sensitive to distributional issues as well as to net losses. Indeed, we suggest that it is extremely valuable to know both the positive and negative flows of money within a community as a result of the presence of gambling activity as well as how much of the social costs overall are actually leaving or staying in the community.

The Porter Dillon study recognizes that the social costs enumerated in their focus group findings are difficult to translate into precise definable dollar losses. They discuss three major categories of economic losses: lost productivity, personal bankruptcy and rehabilitation of problem players. In their



discussion of each of these categories they note that no proper social cost study of problem VLT players in the province has ever been undertaken. They review some findings from the Focal Research Video Lottery Player survey, but that study was not designed to provide social cost data. There is, therefore, little information that they can use to estimate reduced labour productivity costs, personal indebtedness and bankruptcy costs and the costs of support services to problem VLT gamblers.

Nevertheless, the Porter Dillon study does attempt to present some crude estimates about the costs of problem gamblers to the province. They do so by deferring to research estimates cited from a 1996 study entitled "The Social Costs of Gambling in Wisconsin" and a 1995 study entitled "An Analysis of the Net Social Benefits from Legalized Gambling in the Province of Manitoba" which calculated the social costs of one problem gambler at \$6,000 (U.S.) and \$14,000 (Can.) respectively. Porter Dillon then converted the U.S. figure to Canadian dollars, brought both estimates to current values and calculated their mid point figure at \$11,600. Next, they simply multiplied the estimated \$11,600 per problem VLT player figure by the total estimated number of problem players in the adult population in the province (6,400 as derived from the Focal Research study). Finally, they calculated that the total societal cost of problem VLT players was in the order of \$74.2 million, or \$6.2 million less than the \$80.4 million government revenue generated by VLT play in the province in 1998.

There are a number of problems with their estimates of social costs and net benefits. First, the Porter Dillon enumeration of social costs is woefully incomplete. There are many more crucial social and economic costs associated with problem gambling, and as the authors themselves note, losses may be greater than their conservative estimates suggest.

Second, there are no rationales provided for the choice of these two social cost estimates (Manitoba and Wisconsin). If Porter Dillon were to replicate these studies then they would be useful guides to sensible research. However, by deferring to only the bottom line estimates in the studies and then projecting them onto the local economy, they are comparing 'apples and oranges.' The estimates in both the Wisconsin and Manitoba studies are based on all problem gamblers, not specifically VLT problem gamblers. Indeed, there are no VLT problem players included in the Wisconsin study since it was not a form of gambling available in that state. The average costs per problem VLT gambler may or may not be the same as the average costs for other types of problem gamblers. The estimates taken from the other studies, then, may not accurately represent the costs associated with only VLT problem players. Ideally, a separate study of the social costs of problem VLT gamblers should be undertaken, although it must be said that this has not yet been done elsewhere.

Furthermore, the determination of costs in both the Wisconsin and Manitoba studies are based on reasonable estimates generated in those specific regional and cultural contexts. The annualized cost per problem gambler is based

upon *local* salaries, unemployment insurance premiums, bankruptcy court costs, court personnel wages and service costs, arrest costs, trial costs, probation and jail costs and social assistance dollars. Indeed, the costs from one state to another vary enormously. For example, the social cost of a serious problem gambler in Connecticut is estimated at \$15,999 per year, while the social cost of a problem gambler in Wisconsin is estimated at \$8,681 per year. The variation in costs is explained by the history, culture, and maturity of gambling markets. Consequently, estimates that are arrived at by clear and precise methods of data collection in one jurisdiction cannot validly be imputed to another (Thompson & Gazel, 1998). Unfortunately, the Porter Dillon report does exactly this and, therefore, we can have little confidence in their cost estimates for VLT problem gamblers in this province.

Third, the calculations of annualized and individualized social costs for problem gamblers are often predicated on calibrating the *career* costs of serious problem gambling and dividing them by an approximate median length of a problem gambler's expected career. Again the duration of gambling careers varies enormously from one region to another and this affects the calculation of social costs. While we know the approximate duration of a VLT problem gambler's career in Nova Scotia, it was not used as a basis for projecting social cost estimates in the Porter Dillon study. Until a serious social cost study of problem gamblers, such as the one we proposed in our final report (MPM

Gaming Research, 1999) is undertaken, we can have little confidence in cost estimates that are driven by studies outside our provincial jurisdiction.

Fourth, as mentioned earlier, there are issues concerning which costs should be included. Should they be costs to the individual (financial bankruptcy, for example)? Should they be costs to others (lost productivity, affecting employers and society as a whole)? Should they be costs to the government (social assistance payments to bankrupt problem gamblers, loss of tax revenue from lost wages, crime-related costs)? These issues are not discussed in the Porter-Dillon report. For example, of the three costs discussed by Porter Dillon, personal bankruptcy would be a cost to the individual, lost productivity would be a cost to society, and rehabilitation costs are incurred partly by families and communities and partly by government.

There are reasons why one might want to know each of these types of costs; conceptually, however, it is important to be clear which costs are relevant for which questions. For example, governments may want to know the net benefits they get from gambling - i.e. government gambling revenues minus government costs incurred due to problem gambling. In that case, only the costs to government would be relevant (increased policing, health services, social assistance). Or, one may want to know total economic benefits (private and public) compared to total costs incurred. Or one may want to understand the distribution of costs and benefits across society, and between public and private

sectors. Each of these questions is important, and each is part of the public discourse around VLTs.

The Porter-Dillon study ignores many of these issues. It reports a simple net benefit (pg. 73), which is neither the net benefit to government nor the net benefit to society. They subtract the \$74.2 million estimated costs of problem gambling "to the provincial economy" from the \$80.4 million revenue government gets from VLTs. However, this relates the total cost of problem gambling (public and private) only to the government benefits. The other benefits in terms of economic activity created are not taken into account.

Finally, the Porter Dillon report speculates on the relationship between prohibition and VLTs in the province, concluding, in effect, that a ban on these machines would not eliminate the social costs associated with problem play on them. Instead, they suggest that these social costs will be transferred to other forms of legal or illegal gambling. Unfortunately they provide no empirical evidence to support this claim, other than to cite comments from their focus group findings which clearly cannot be generalized to a larger population. Indeed, the Porter Dillon report acknowledges that the elimination of VLTs may actually reduce excessive gambling and this, in turn, plausibly could also actually reduce social costs. Consequently, they weaken their own argument and, at best, we can only conclude that the social costs associated with problem VLT play may as reasonably decline as remain the same.

#### **d) Distributional Impacts of a VLT Ban (section 5.4)**

The final section of the Porter Dillon report examines some of the ways subgroups would be affected by a ban on VLTs. As we have emphasized throughout, distributional issues are a very important part of socio-economic impact analysis. The report discusses impacts on illegal VLT operators and distributors, First Nation bands, other gambling operators, and licensed establishments who will lose VLT revenues. This is not a comprehensive list of potential winners and losers. For example, one could add charities dependent on VLTs, the ALC, and other entertainment related businesses.

The discussion of issues related to each of the above groups is informative, but necessarily limited by the absence of data as well as by the somewhat unreliable behavioral assumptions underlying the whole cost exercise, as discussed in detail above. The discussion of the effects on other gambling operators is also interesting, and addresses the issue of the extent to which gambling products are substitutes or supplements to each other, drawing on work by Marfels (1997). This discussion, however, would have been more appropriately placed at the beginning of section 5, since, as we have demonstrated, all the cost estimates are driven by an assumption that they are substitutes! The position taken in this section of the report is more nuanced - in fact the authors argue that regular non-problem players, who contribute "about 40 percent of VLT revenues, may also divert significant portions of their VLT expenditures to other forms of entertainment in Nova Scotia" (pg. 78). This

certainly seems reasonable, but it contradicts the assumptions embedded in the cost estimates in sections 5.1 and 5.2.

## **APPLICATION TO OTHER GAMBLING RESEARCH**

Should this study be replicated for other types of gambling activities such as bingos, lotteries and casinos? Obviously from our comments about research design and methodologies, socio-economic impact estimates, fiscal impacts and economic and financial cost projections, we have serious reservations. In our opinion, the overall research design of the Porter Dillon study, which combined a focus group approach with an incremental impact analysis, was ill conceived and its application, therefore, resulted in dubious findings. While each of these research methods are useful in and of themselves, the focus group approach did not provide the necessary information on which to base reliable impact cost estimates.

We do not recommend that future research in gambling follow this model. In addition to our reservations about overall research design, the Porter Dillon study is, in our opinion, rather derivative and to apply its methodologies to bingo, casinos, or lotteries would require the pre-existence of numerous player studies, impact studies and additional detailed government statistical data. This data/knowledge base is currently lacking in the province for other forms of gambling such as bingos, casinos and lotteries and would be costly to accumulate. The authors of the Porter Dillon study note that the absence of

reliable data of this type made their analytical task extremely difficult. It is vital that "good data" be generated.

We have argued as well that socio-economic impact estimates are only as reliable as the behavioral assumptions underlying them. In our opinion, there remains a lack of solid research from which to derive these assumptions. The Porter Dillon study was able to draw on the findings from the Focal Research Players study as well as their own focus group research, however, as noted above, this data lacked precise information about player behaviour in relation to availability and accessibility of VLTs. Based on the comments of focus group participants, one could draw different conclusions than those found in section 5 of the Porter Dillon report. For example, one could just as easily conclude that a ban would curb VLT play for at least some problem players and result in reduced spending levels.

For other gambling activities, the data on behavioral characteristics of players is even less available. As argued in our earlier report (MPM Gaming Research, 1999), a better understanding of player types by gambling activities is needed. For example, we proposed that a study of regular non-problem players (some of whom we called serious social players), which compared bingo and VLT players, would clarify behavioral differences between these two groups. This type of comparative information is vital if we wish to minimize the negative impacts of gambling or analyze the social impacts of a change (increase or decrease) in the availability of gambling products. Indeed, our proposed study of



consumer expenditure data would yield statistically valid estimates of the relationship between gambling, other expenditures and savings/debt rates. These data estimates would improve the behavioral assumptions needed for impact estimations such as those undertaken in the Porter Dillon study. In other words, to get beyond "back of the envelope" estimates of the impacts of gambling, more basic research is needed on the behaviour of different types of players in different gambling venues.

What are we to make of the estimation of the dollar value of overall economic impacts, as calculated in section 5.1 of the report? If this estimation approach is to be applied to other forms of gambling, then researchers should go back "to square one" and re-conceptualize the direct and indirect impacts of those gambling expenditures. While the type of estimates provided by CANMAC are always limited by the level of aggregation of available data, and always involve very simplifying assumptions, it is, nevertheless, important to make the best possible assumptions about the parameters to be used. Any such estimates, of course, are going to be approximate. Furthermore, if one is making assumptions about redirecting spending, then more basic research is also needed on gambling behaviour and household spending patterns before reasonable impact estimates can be arrived at.

Distributional issues associated with gambling are perhaps the most important and controversial. These issues receive some treatment in the Porter-Dillon study in sections 5.2 and 5.4. As the authors note, even if overall

economic impact is little changed by transformations in the availability of gambling products, there will be distributional effects. From the government's point of view the fiscal impacts are very important. Porter-Dillon's conclusions on the fiscal impact of a VLT ban depend on the methodology and figures in Table 5.2. In principle, the totals can be further disaggregated for lotteries, casinos or bingos. However, to do so it is necessary to revisit the original sources and methodology used in the AGA annual reports, and determine clearly the comparable categories for different types of games. For example, as noted above, the income guarantee for the casinos is included in operating expenses, whereas it might arguably be considered government revenue for purposes of calculating fiscal impacts.

The more difficult challenges in calculating fiscal impacts is to more accurately predict how consumer expenditures will be redirected, and to model the direct, indirect and induced fiscal impacts of these expenditures as they circulate through the economy, giving rise to direct gambling, sales tax and income tax revenues for the province. Our earlier research (MPM Gaming Research, 1999) concludes that there are significant differences across gambling venues which we would expect to influence the substitutability of gaming products. However, there is a lack of quantitative research on expenditure behaviour which could be used to derive the parameters for fiscal impact models. In the absence of such data, one must make reasoned choices about parameters consistent with the best available knowledge of the gambling population for each

gambling activity. There is no point in replicating this study and simply assuming that all money is respent on "other" gambling products.

The other distributional issues discussed by Porter-Dillon have parallels in the other gaming venues, and are important for future research. One can imagine researching the distributional implications of changing from the Atlantic Lottery Corporation to a provincial run lottery, of changing how bingo revenues are shared, or of changing the contract with the casino operators. The Porter-Dillon approach in section 5.4 makes simple assumptions and draws reasonable conclusions based on those assumptions. But the challenge is to expand the data base so that the assumptions are accurate or, drawing on existing qualitative and quantitative knowledge, make the most realistic assumptions possible. In addition to the important distributional issues addressed in the Porter Dillon report, others which could be pursued across gaming venues include rural urban, gender, and age related impacts.

Finally, we have raised serious questions about the way in which the authors of the Porter Dillon study arrived at their estimations of the economic and social costs of VLT gambling (section 5.3). Because of problems about definition, distribution, and contexts of costs, and because they uncritically adopted estimates from other studies, we do not think their approach can be usefully replicated to other Nova Scotia gambling activities. Nevertheless, if all of our above concerns are taken into account, then it is possible and valuable to do a solid social cost study. To that end, we think that the methodologies devised

by Cyrenne (1995) in his study entitled "An Analysis of the Net Social Benefits From Legalized Gambling in the Province of Manitoba", by Thompson, Gazel and Rickman (1996) in their report on "The Social Costs of Gambling in Wisconsin", by Thompson and Gazel (1998) in their comparative work on the social costs of gambling in Connecticut and Wisconsin and by Meyer, Fabian and Peter (1995) in their research paper entitled "The Social Costs of Pathological Gambling" are more effective and efficient in eliciting valid and reliable socio-economic impact and social cost data. It is these methodologies and studies that are especially worthy of further replication in Nova Scotia. An important issue in such a study would be to examine whether all problem gamblers incur the same social costs or whether costs per problem gambler differ substantially among bingo, casinos and lotteries.

In conclusion, the Porter Dillon study raises some fundamental questions that are important to ask and answer for other kinds of gambling. However, as we have noted throughout, the results of any impact study are only as good as the methodologies, behavioral assumptions and parameter values used in the estimates. Unfortunately, there is an inadequate research base on which to build these estimates for different types of gambling. Until more basic research is done, efforts such as the Porter Dillon study will produce dollar values in which we can have little confidence.

## BIBLIOGRAPHY

CANMAX Economics Ltd. (1997) "Nova Scotia VLT's: An Economic Impact Statement" "Annual Gaming Report", Alcohol and Gaming Authority 1996-97, Appendix B.

Cyrenne, Philippe (1995). An Analysis of the Net Social Benefits From Legalized Gambling in the Province of Manitoba. Winnipeg, Manitoba, Department of Economics, University of Winnipeg.

Dickerson, Mark (1993). A Preliminary Exploration of a Two-Stage Methodology in the Assessment of the Extent and Degree of Gambling Related Problems in the Australian Population. Gambling Behavior and Problem Gambling. W. Eadington and J. A. Cornelius. Reno, Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada.

Focal Research (1998). Nova Scotia Video Lottery Players Survey 1997-98. Nova Scotia Department of Health Problem Gambling Services, Halifax, Nova Scotia. October.

Kindt, John Warren (1994). "Increased Crime and Legalizing Gambling Operations: The Impact on the Socio-Economics of Business and Government." Criminal Law Bulletin 30 (January-February): 538-555.

Lesieur, Henry R. and K. Puig (1987). "Insurance Problems and Compulsive Gambling." Journal of Gambling Behavior, V. 3, No. 2: 123-136.

Lesieur, Henry R. (1996). "Social Impacts of Expanded Gambling." Unpublished Paper, Illinois State University, School of Criminal Justice, Normal, Illinois.

Lesieur, Henry R. (1997). Measuring the Costs of Pathological Gambling. Paper presented at the Tenth International Conference on Gambling and Risk Taking, Montreal, Quebec.

Marfels, Christian (1997). "Casino Gaming and VLT Gaming: Substitution Effect or Supplementation Effect?" Gaming Law Review 1(3):333-339.

Meyer, Gerhard, T. Fabian and W. Peter (1995). "The Social Costs of Pathological Gambling". Unpublished Paper presented at the European

Conference on Gambling Studies and Policies Issues, Aug. 2-5, St. John's College, Cambridge. UK.

Politzer, R. M., J. S. Morrow & S. B. Leavey (1981). "Report on the Societal Cost of Pathological Gambling and the Cost-Benefit/Effectiveness of Treatment". Paper presented at the Fifth International Conference on Gambling and Risk Taking, Lake Tahoe, USA.

Porter Dillon (1999). Socioeconomic Impact of Video Lottery Terminals: Final Report. Prepared for the Alcohol and Gaming Authority, Halifax, Nova Scotia.

Thompson, William N., Ricardo Gazel and D. Rickman (1996). The Social Costs of Gambling in Wisconsin. Wisconsin, The Wisconsin Policy Research Institute.

Thompson, William N., Ricardo Gazel and D. Rickman (1997). The Last Resort Revisited: The Spread of Casino Gambling as a Prisoner's Dilemma, Gambling: Public Policies and the Social Sciences. W. R. Eadington and J. A. Cornelius. Reno, Nevada, Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada, Reno.

Thompson, William N., and Ricardo Gazel (1998). "Social Costs of Gambling: A Comparative Study of Nutmeg and Cheese State Gamblers." Paper presented at the Twelfth National Conference on Problem Gambling, Las Vegas, Nevada.

Vaillancourt, Francoise (1999). "Government Gambling Revenues, 1985-1995/96: Evidence from Canada, Great Britain and Australia." Paper presented at the 1998 Annual Conference of the National Tax Association, Austin, Texas.

Walker, Michael B. (1992). The Psychology of Gambling. Oxford, Butterworth-Heinemann.



# Appendix J





---

### Monthly Video Lottery Expenditures Versus Monthly Expenditures For Other Gaming Activities

---

It was hypothesized in the Nova Scotia Alcohol & Gaming Authority's (NSAGA) 1998 final report of *A Survey of the Prevalence and Perceptions of Gaming in Nova Scotia* that people who spend high amounts of money on one form of gaming are predisposed to spend more on other forms of gaming as well. More specifically, it was theorized that as video lottery expenditures increased, there would be a similar increase in other gaming activities expenditures. While preliminary support for the relationship was found, the authors cautioned that further studies would have to be conducted due to sample size limitations.

Given that only a small percentage of adults in Nova Scotia engage in video lottery gaming on a regular and continuous basis ( $\approx 6\%$ ), obtaining reliable measures of VLT and other gaming expenditures within this group is usually beyond the scope of most random provincial surveys. Therefore, the NSAGA commissioned Focal Research Consultants Ltd., with the permission and cooperation of the Nova Scotia Department of Health (NSDOH), to undertake additional analysis using the data obtained in the NSDOH's 1997/1998 Nova Scotia Video Lottery (NS VL) Player Survey.

The 1997/1998 NS VL Player's Survey had been conducted in partnership with the NS DOH; Problem Gambling Services and Focal Research Consultant's Ltd. This study represents the first comprehensive quantitative survey of video lottery play in Nova Scotia. In total, 18,650 adults in Nova Scotia were randomly sampled to identify 927 Regular VL players, of which 711 completed detailed surveys on play behaviors, expenditures, attitudes and characteristics. In addition, an independent random survey of adults was conducted to obtain comparative measures for those who have never played VLT's (Non-players,  $n=246$ ) and those who only play on a casual or trial basis (Casual VL players,  $n=131$ ). The data for the two surveys was weighted and combined to obtain figures for all adults

in Nova Scotia.<sup>1</sup> Further details regarding the sampling design and method are available in the final report of 1997/98 Nova Scotia VL Players' Survey.

The original study was intended to be an effective vehicle for exploring additional relationships and areas of interest. It was also anticipated that the findings from the research would act as a resource and reference source for the various Video Lottery stakeholders within Nova Scotia.

The Nova Scotia Department of Health considered the current request by the NSAGA to be consistent with the 1997/1998 Nova Scotia VL Player research mandate. Subsequently, Focal Research undertook additional analysis in order to quantify and confirm the relationship in expenditures between VL and other forms of gaming available in Nova Scotia.

### **Method:**

The examination of the relationship between VL expenditure and expenditure on other types of gaming consisted of two primary analyses:

1. **Segmentation Analysis:** whereby the data was grouped into 4 VL expenditure segments. Average participation rates and expenditures for other gaming activities are compared among the 4 VL expenditure segments.
2. **Correlation Analysis:** to test the relationship between monthly VL expenditures and monthly expenditures for other gaming activities.

All expenditure data is calculated on measures of the amount spent on the various gaming activities in the month preceding participation in the survey. Furthermore, players were asked to report on amount spent (out-of-pocket) rather than the amount wagered on VLT's. VLT expenditures

---

<sup>1</sup> There were 23 regular VL players identified in the general population survey that were subsequently dropped from the analysis and replaced with the data from the Regular VL Players survey (n=711).

were derived based on the number of times an individual had played in the last month and the amount spent out-of-pocket each time. This approach has been found to yield more accurate measures of expenditure, the sum of which typically falls within  $\pm 3\%$  of actual provincial revenues.

In the original study participation and expenditures for 14 different gaming options were measured. For the purpose of the current analyses, the activities were grouped and examined by the following main gaming categories and subgroups for a total of 11 gaming categories.

- Total Monthly Gaming Expenditures (including VLT's)
- Total Monthly Gaming Expenditures (excluding VLT's)
- Combined Lottery Draws And Instant Tickets
  - Lottery Draws Only (including Lotto 6/49, Lotto Super 7, TAG, etc.)
  - Instant Tickets Only (\$1.00 & \$2.00 Scratch n Wins, Breakopens)
- Combined Casino Gaming
  - Slot Machines
  - Table Games ( Casino Games, excluding Slot Machines))
- Bingo for Money (excluding Lotto Bingo)
- Sports Betting (including Proline, Other Sports Bets/Pools))
- Other Gaming (including Charity Raffles/Draws, Horse Racing, Card Games Outside the Casino, and Other Betting such as Dog Races and Off-Track Betting)

A minimum 90% confidence level ( $p < .10$ ) was used for all tests of significance. This approach minimizes Type II errors (accepting a hypothesis that should be rejected), while maintaining an acceptable threshold for Type I errors (rejecting a hypothesis that should be accepted).

## **SEGMENTATION ANALYSIS**

The following analyses examine gaming behaviour (participation and expenditure levels) in terms of the average amount spent on any gaming by Nova Scotian adults in a given month (i.e., the amount spent in the month prior to participating in the survey). The results of the segmentation analysis contrasts adults' gaming behaviour by how much they *spend on video lottery play in a given month*.

### **VLT Expenditure Segments**

#### **1. Spend \$0 - "Non-VL Players"**

Typically spent nothing on video gambling in a given month. The Non-VL Players represent approximately 89% of adults in Nova Scotia each month.

#### **2. Spend \$1 to \$20 Per Month - "Light VL Spenders"**

Spent between \$1.00 and \$20.00 on video lottery gambling in a given month; comprised mainly of Casual or Infrequent Regular<sup>2</sup> VL players who tend to play VLT's fewer than four times per month. Light VL Spenders represent approximately 7% of adults in Nova Scotia each month.

#### **3. Spend \$21 to \$100 Per Month - "Moderate VL Spenders"**

Spent, on average, between \$21.00 and \$100.00 on video lottery gambling in a given month; comprised mainly of regular VL gamblers (i.e., play on a regular monthly basis), but do not currently experience problems controlling their video lottery play. Moderate VL Spenders

---

<sup>2</sup> In the 1997/98 Nova Scotia VL Players' Survey, Regular VL Players (i.e., those playing VLT's once a month or more on an on-going basis) were segmented into three groups: Infrequent Players (<4 times/month), Frequent Players (4+ times/month) and Problem VL Players (as identified in the analysis). Frequency of playing VLT's for the Frequent and Problem Player segments was similar, thus, any differences in responses could be attributed to other factors. Those adults who have tried video lottery gaming at some time in the past, but who do not play on a regular monthly basis (i.e., on average, play less than once per month) were profiled as Casual VL Players.

---

represent approximately 2% of adults in Nova Scotia each month.

**4. Spend \$101+ Per Month - "Heavy VL Spenders"**

Spent over \$100.00 on video lottery gambling in a given month; comprised mainly of regular VL gamblers, nearly half of whom experience problems controlling their video lottery play. Heavy VL Spenders represent approximately 2% of adults in Nova Scotia each month.

**NOTE:** *A total of 13 respondents could not be classified using the above segmentation due to missing data in the surveys. Therefore, these adults are excluded from the analysis.*

**TABLE 1**  
**Participation & Monthly Expenditure on Gambling Activities**  
**(Overall) By VLT Monthly Expenditure Segment**

	Spend \$0 Per Month (n=373)	Spend \$1 to \$20 Per Month (n=275)	Spend \$21 to \$100 Per Month (n=213)	Spend \$101+ Per Month (n=214)	TOTAL NS ADULTS; (n=1075)
% of Population	89%	7%	2%	2%	100%
Number of gambling options tried (ever played) (Including VLT's)†					
Average	3.3*	5.6	5.3	5.7	3.5
Median	3	6	5	6	3
Number of gambling options played in the last month (Including VLT's)†					
Average	1.7*	3.8	4.2	4.4	2.0
Median	2	4	4	4	2
Number of gambling options played regularly (Including VLT's)†					
Average	0.8*	2.0*	3.1	3.3	1.0
Median	1	1	3	3	1
Total monthly gambling expenditure per adult (Excluding VLT's)†					
Average	\$23.69*	\$39.20*	\$61.31*	\$121.59*	\$27.31
Median	\$9.00	\$25.00	\$39.00	\$55.00	\$10.00
Total monthly gambling expenditure per adult (Including VLT's)†					
Average	\$23.69*	\$48.35*	\$120.36*	\$919.87*	\$42.64
Median	\$9.00	\$34.00	\$101.00	\$425.00	\$10.00

†Due to missing data in survey response, a total of 13 respondents were excluded from the analysis.

†NOTE: Participation in, and expenditure on the 14 different gambling options described

earlier are included in average/median calculations.



-shading indicates differences among VLT expenditure segments at the 90%+ confidence level (horizontal comparisons).

\* - Indicates significant difference at 95% confidence level (horizontal comparisons).

### **Results - Segmentation Analysis**

At some time in the past, adults in Nova Scotia have tried approximately 3 to 4 of 14 different types of gambling activities available in Nova Scotia. On average, Nova Scotians typically participate in two gambling activities in the past month, but play only one game of chance for money on a regular monthly basis, primarily lottery tickets.

In general, approximately 11% of adults in Nova Scotia play any video lottery games each month, of which just over half (6% of all Nova Scotia adults) can be characterized as regular players, playing at least once a month on a fairly continuous basis.

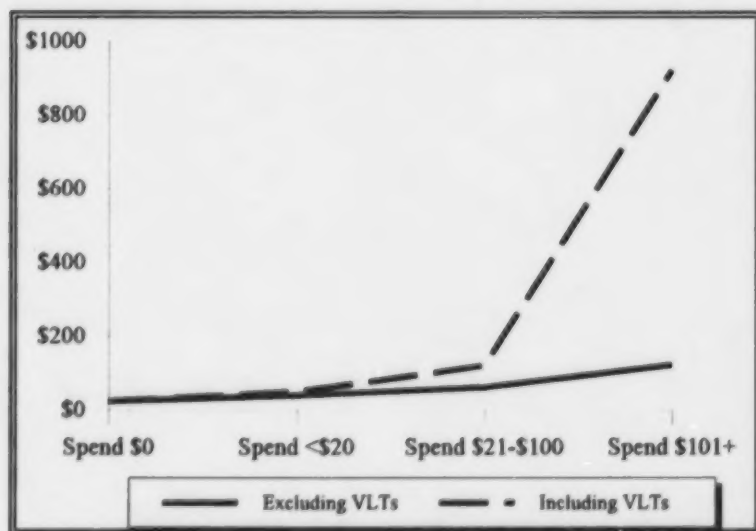
Typically, adults who spend money on VLT's are more likely to also participate in other forms of gambling than adults who do not play video lottery machines. More specifically, those adults in the province who had spent any money on video lottery gaming are significantly more likely than their counterparts to have:

- tried (ever played) more gaming activities at least once in the past (5.3 to 5.6 versus 3.3);
- participated in more types of gambling over the past month (2.0 to 3.3 versus 1.0);
- participated in more types of gaming on a regular monthly basis (2.0 to 3.3 versus 0.8).

Among those who do spend money on VLT's, no notable differences were found in the average number of gambling options ever played, or played during the past month for Light, Moderate or Heavy VL spenders. However, Moderate (\$1 to \$20 per month) and Heavy VL spenders (more

than \$100 per month on VLT's) play more games of chance for money on a *regular* basis than is the case for Light VL spenders. **Therefore, participation in other gaming activities is higher for those who play any video lottery games, with those spending at moderate to heavy levels only distinguished by their tendency to report being involved in more gaming activities on a regular monthly basis (3.3 versus 2.0).**

**Figure 1**  
**Total Monthly Gambling Expenditures Per Adult in NS**  
**By VLT Monthly Expenditure Segments**



In terms of expenditure, VLT gamblers in Nova Scotia participate in a wider variety of gaming options and, as a result, tend to spend more money on gambling overall in a given month than adults who do not play VLT's.

On average, Nova Scotian adults spend just over \$27 on gaming, exclusive of video lottery. The average monthly expenditure on gambling, excluding VLT's, however, significantly increases in relation to how much is spent on video lottery gambling. This clearly illustrates a relationship between



expenditures on video lottery and other types of gaming in the province. Heavy VL spenders, in general, spent nearly twice as much on other types of gaming as Moderate VL spenders (\$122 versus \$61 per month), although adults in each group participated in a similar number of gaming options on a regular basis. The expenditure pattern holds true for Light versus Moderate VL spenders as well (\$61 versus \$39 per month on gambling other than VLT's). **As a result, expenditure on other gaming options, rather than participation, appears to be a more significant discriminator in differentiating behaviour among Light, Moderate and Heavy VL spenders.**

This direct relationship in expenditures is evident for Lottery Draws and Instant tickets, Casino Gaming in general, Casino Table games specifically and Sports Betting. While VLT players typically spend more on Bingo than Non-Players, the discrepancy in Bingo expenditure among the Light, Moderate and Heavy VL spenders tends to be less pronounced with those spending beyond \$20.00 on VLT's exhibiting similar average expenditure levels for Bingo. This suggests that there may be situational factors associated with Bingo which tend to exert a cap or upper limit on the amount that can be spent.

It is noteworthy that for Slot Machines and "Other" Gaming Activities, the only significant difference in average monthly expenditures is noted for the Heavy VL spenders (>\$100/month). On average, those reporting the highest expenditure on VLT's tend to spend at levels three to four times higher for these gaming activities ( $\approx \$23.50$ ) than any other adults, with no notable difference among the other VL expenditure segments (Non-Players, Light or Moderate VL spenders -  $\approx \$6.50$ ). Thus, it would appear that Heavy VL spenders may be particularly susceptible and attracted to slot machines and these other types of gaming activities.

Despite the strong tendency for VL expenditure patterns to be related to expenditure patterns for other forms of gaming available in Nova Scotia, it should be emphasized that the amount spent on VLT's by the Heavy VL spenders far exceeds their expenditures on any other gaming option. This means that although expenditures on gaming, excluding VLT's, is at least

twice as high for Heavy VL Spenders, once their VLT expenditure is included in the equation, their total gambling expense per month is typically nine times higher than even Moderate VL Spenders. In fact, Heavy VL Spenders allocate, on average, 87% of their total monthly gaming expenditure to play of VLT's versus 49% for Moderate and 19% for Light VL Spenders.

**TABLE 2**  
**Expenditure on Various Gambling Activities Per Adult**  
**By VLT Monthly Expenditure Segment**

	Spend \$0 Per Month (n=373)	Spend \$1 to \$20 Per Month (n=275)	Spend \$21 to \$100 Per Month (n=213)	Spend \$101+ Per Month (n=214)	TOTAL NS ADULTS: (n=1075)
<b>Percent of Population</b>	<b>89%</b>	<b>7%</b>	<b>2%</b>	<b>2%</b>	<b>100%</b>
<b>LOTTERY TICKET GAMES</b>					
Average Monthly Exp.	\$9.78*	\$17.90*	\$27.46*	\$44.56*	\$11.34
<b>Lottery Draw Games</b>					
Average Monthly Exp.	\$6.82*	\$8.58*	\$15.37*	\$23.09*	\$7.41
<b>Instant Lottery Games</b>					
Average Monthly Exp.	\$2.96*	9.32*	\$12.09*	\$21.47*	\$3.93
<b>CASINO GAMES</b>					
Average Monthly Exp.	\$4.49*	\$3.91*	\$11.51*	\$37.52*	\$5.14
<b>Casino - Slot Machines</b>					
Average Monthly Exp.	\$3.38	\$3.28	\$7.59	\$24.65*	\$3.81
<b>Casino Table Games</b>					
Average Monthly Exp.	\$1.11	\$0.63	\$3.92	\$12.87*	\$1.33

**TABLE 2 - Continued**  
**Expenditure on Various Gambling Activities Per Adult**  
**By VLT Monthly Expenditure Segment**

	Spend \$0 Per Month (n=373)	Spend \$1 to \$20 Per Month (n=275)	Spend \$21 to \$100 Per Month (n=213)	Spend \$101+ Per Month (n=214)	TOTAL NS ADULTS <sup>‡</sup> (n=1075)
<b>BINGO</b>					
Average Monthly Exp.	\$2.86*	\$9.52	\$12.84	\$12.09	\$3.75
<b>SPORTS BETTING/SPORT SELECT PROLINE</b>					
Average Monthly Exp.	\$0.34*	\$1.29*	\$3.13	\$4.29	\$0.53
<b>OTHER GAMBLING ACTIVITIES</b>					
Average Monthly Exp.	\$6.21	\$6.57	\$6.37	\$23.13*	\$6.55

<sup>‡</sup>Due to missing data in survey response, a total of 13 respondents were excluded from the analysis.

<sup>†</sup>NOTE: Participation in, and expenditure on the 14 different gambling options are included in average/median calculations:



-shading indicates differences among VLT expenditure segments at the 90%+ confidence level (horizontal comparisons).

\* - Indicates significant difference at 95% confidence level (horizontal comparisons).

**TABLE 3**  
**Participation In Various Gambling Activities In Nova Scotia**  
**By VLT Monthly Expenditure Segment**

	Spend \$0 Per Month (n=373)	Spend \$1 to \$20 Per Month (n=275)	Spend \$21 to \$100 Per Month (n=213)	Spend \$101+ Per Month (n=214)	TOTAL NS ADULTS: (n=1075)
% of Population	89%	7%	2%	2%	100%
<b>LOTTERY TICKET GAMES (Including Draws, Scratch 'n Wins, Breakopens)</b>					
Trial (Ever Played)	82%*	99%	98%	97%	84%
Play in Last Month	62%*	90%	92%	91%	65%
Regular Play (1+ per month)	43%*	69%	70%	73%	46%
<b>Lottery Draw Games (Including Lotto 6/49, Lotto Super 7, TAG, etc.)</b>					
Trial (Ever Played)	78%*	94%	92%	90%	80%
Play in Last Month	56%*	73%	79%	81%	59%
Regular Play (1+ per month)	39%*	51%	61%	62%	41%
<b>Instant Lottery Games (Including \$2.00 Scratch 'n Wins, \$1.00 Scratch 'n Wins, Breakopens)</b>					
Trial (Ever Played)	49%*	78%	88%	86%	53%
Play in Last Month	32%*	59%	72%	71%	35%
Regular Play (1+ per month)	13%*	40%	48%	48%	16%
<b>CASINO GAMES (Including Slot Machines, Table Games)</b>					
Trial (Ever Played)	26%*	48%	60%	63%	29%
Play in Last Month	7%*	19%	21%	22%	8%
Regular Play (1+ per month)	2%*	2%*	8%	11%	2%

**TABLE 3 - Continued**  
**Participation In Various Gambling Activities In Nova Scotia**  
**By VLT Monthly Expenditure Segment**


	Spend \$0 Per Month (n=373)	Spend \$1 to \$20 Per Month (n=275)	Spend \$21 to \$100 Per Month (n=213)	Spend \$101+ Per Month (n=214)	TOTAL NS ADULTS‡ (n=1075)
<b>% of Population</b>	<b>89%</b>	<b>7%</b>	<b>2%</b>	<b>2%</b>	<b>100%</b>
<b>Casino - Slot Machines</b>					
Trial (Ever Played)	24%*	47%	54%	57%	27%
Play in Last Month	5%*	18%	20%	19%	7%
Regular Play (1+ per month)	1%*	2%*	7%	9%	2%
<b>Casino - Table Games</b>					
Trial (Ever Played)	7%*	24%	28%	27%	9%
Play in Last Month	3%*	2%*	7%	9%	3%
Regular Play (1+ per month)	1%*	1%*	4%	6%	1%
<b>BINGO (Excluding Lotto Bingo)</b>					
Trial (Ever Played)	12%*	24%	38%	33%	14%
Play in Last Month	7%*	10%	19%	14%	7%
Regular Play (1+ per month)	4%*	6%	16%	12%	4%

**TABLE 3 - Continued**  
**Participation In Various Gambling Activities In Nova Scotia**  
**By VLT Monthly Expenditure Segment**

	Spend \$0 Per Month (n=373)	Spend \$1 to \$20 Per Month (n=275)	Spend \$21 to \$100 Per Month (n=213)	Spend \$101+ Per Month (n=214)	TOTAL NS ADULTS‡ (n=1075)
% of Population	89%	7%	2%	2%	100%
<b>SPORTS BETTING/SPORT SELECT PROLINE</b>					
Trial (Ever Played)	8%*	16%	21%	29%	1%
Play in Last Month	3%*	7%	13%	19%	4%
Regular Play (1+ per month)	2%*	5%	11%	15%	2%
<b>OTHER GAMBLING ACTIVITIES (Including Charity Raffles/Draws, Horse Races, Card Games, Outside Casinos, Other Betting)</b>					
Trial (Ever Played)	68%*	81%	73%	79%	69%
Play in Last Month	46%	74%	39%	42%	45%
Regular Play (1+ per month)	15%*	21%	23%	30%	16%

‡Due to missing data in survey response, a total of 13 respondents were excluded from the analysis.

†NOTE: Participation in, and expenditure on the 14 different gambling options described earlier are included in average/median calculations:

 -shading indicates differences among VLT expenditure segments at the 90%+ confidence level (horizontal comparisons).

\* - Indicates significant difference at 95% confidence level (horizontal comparisons).

---

## **CORRELATION ANALYSIS**

The analysis consists of two parts. The first, among the 711 regular video lottery players from the 1997/98 Nova Scotia Video Lottery Players Survey, uses correlation analysis to test the relationship between monthly video lottery expenditures and monthly expenditures for the other gaming activities. This approach examines the relationship between the amount spent on video lottery and the amounts these same players also spend on other forms of gaming regardless of whether they were involved in other forms of gaming or not. By default those VL players who did not participate in a particular gaming activity will have spent nothing (\$0) on that form of gaming. This is useful in so far as it takes into account current gaming expenditure behaviour for all VL players in the province. However, the association between monthly expenditure on VLT's and other forms of gambling may be less clear because of the high degree of non-participation for many of the gaming activities.

In many cases participation rates for some forms of gaming are low due to factors such as accessibility, seasonality and current distribution strategies. For example, not all VLT players have similar access to casinos (i.e., those living in Halifax or Sydney have greater access) and, consequently, most VLT players will not have spent any money playing casino games in a given month. Therefore, results at an aggregate level (i.e., for all VL players) may mask the relationship for those who are playing both VLT's and casino games due to the relatively lower proportion of players who engage in both activities in a given month. Subsequently, the second correlation analysis is based on those VL players who spent any amount of money in the past month on both VLT's and the particular gaming activity in question. By examining the data within the player groups, we can ascertain whether higher spending on VLT's each month is related to higher spending for each of the various gaming activities among those who actually wager on the games.

## Results - Correlation Analysis

**Table 4: Correlation between Monthly Expenditures on VLT's and Other Gaming Activities**

Monthly expenditure on ...	n	r	r <sup>2</sup>
Gaming activities excluding VLT's	669	.34**	.12
Combined Lottery draws and instant tickets	669	.31**	.10
Draws only	669	.20**	.04
Instant tickets only	669	.29**	.08
Combined Casino Gaming	669	.29**	.08
Slot Machines	669	.30**	.09
Table Games	669	.12**	.02
Bingo	669	.01	--
Other sports betting (including Proline)	669	.01	--
Other Gaming	669	.14**	.02

\*  $p < .10$ ; \*\*  $p < .05$ ; r=correlation coefficient; r<sup>2</sup>=variance explained

The results from the first correlation analysis provide further support to the hypothesis that people who spend higher monthly amounts on VLT's also spend more on other forms of gaming. In fact, when all VLT players are included, the results show that a significant relationship exists between monthly expenditure on VLT's and monthly expenditures for almost all of the various gaming activities tested. Only for bingo and other sports betting was no relationship found.

As hypothesized, there was a significant relationship between monthly expenditure on VLT's and the combined monthly expenditures on other gaming activities excluding VLT's, explaining approximately 12% of the variance for monthly VLT expenditures. Among the various gaming categories, monthly expenditures on lottery draws and instant tickets are most strongly associated with monthly VLT expenditures, of which instant tickets are the most influential. This is not entirely unexpected given that lottery tickets are the most common form of gaming engaged in by adults in general in Nova Scotia ( $\approx 50\%$  of all adults play at least once each month). Monthly expenditure on casino gaming, primarily monthly slot



machine expenditures ( $r=.30$ ,  $p<.05$ ), is also related to monthly VLT expenditures.

While there is a weak association noted between monthly VLT expenditure and monthly expenditure on Casino table games and "other" gaming, no such relationship exists for bingo and sports betting.

**Table 5: Correlation Between Monthly Expenditures on VLT's and Other Gaming Activities for those VL Players who Spent Money in the Past Month on VLT's and Each Particular Gaming Activity**

Monthly expenditure on ...	n	r	r <sup>2</sup>
Gaming activities excluding VLT's	663	.35**	.12
Combined Lottery draws and instant tickets	629	.32**	.10
Draws only	550	.20**	.04
Instant tickets only	480	.30**	.10
Combined Casino Gaming	139	.47**	.22
Slot Machines	126	.50**	.25
Table Games	49	.28*	.08
Bingo	105	.00	--
Other sports betting (including Proline)	98	.06	--
Other Gaming	266	.19**	.04

\*  $p<.10$ ; \*\*  $p<.05$ ;  $r$ =correlation coefficient;  $r^2$ =variance explained

The second correlation analysis was conducted with those who engaged in both VL play and the specific gaming activity being examined. The results from the second correlation analysis confirm the results noted previously. Again, there is a significant relationship between monthly VLT expenditures and monthly expenditures for most of the gaming activities taken into account. In fact, the relationship has been strengthened substantially for four of the gaming activities.

The significant association between monthly VLT expenditures and the combined monthly expenditures for the other gaming activities (excluding VLT's) confirms the hypothesis that, among players, those spending higher

amounts on VLT's are also more likely to be spending higher amounts on other forms of gaming. However, combined gaming expenditure is not most predictive of monthly VLT expenditures. **Instead, casino gaming is most strongly associated with monthly VLT expenditures.** It appears that those VL players spending large monthly amounts on VLT's are also spending higher amounts at the casino, most notably on slot machines ( $r=.50, p<.05$ ).

Monthly spending on VLT's is also associated with monthly expenditures on lottery draws and instant ticket games, of which spending on the instant tickets is the most influential ( $r=.30, p<.05$ ). Thus, those who spend more playing VLT's each month and play Scratch 'n Win tickets are also more likely to spend at higher levels for these lottery ticket products.

Monthly VLT expenditure is also related to monthly expenditure on "other" gaming. More clearly, when VLT players play other games of chance for money, those spending higher amounts each month on VLT's are more likely to spend more each month on "other" gaming which includes charity raffles/draws, horse races, cards/card games for money outside the casino, and/or any other types of betting/gambling (e.g., dog races, off-track betting, etc.).

Again, monthly expenditures for Bingo and Sports Betting appear to be independent of monthly VLT expenditures among those playing these forms of gaming.

## **DISCUSSION**

As hypothesized in the NSAGA 1998 Survey of Prevalence and Perceptions of Gaming in Nova Scotia, there is a positive relationship between the amount spent on VLT's and other gaming expenditure, in so far as those who spend at higher levels for video lottery, also tend to spend at higher levels for most other forms of gaming. Essentially, as VLT expenditures increase, the amount spent collectively on gambling activities tends to also increase exponentially. This is largely due to the amount of money typically spent on VLT's each month. In fact, on average, VLT

expenditures alone account for over one-third ( $\approx 36\%$ ) of the total monthly amount spent by adults in Nova Scotia on any gambling activities, although only 11% will have played the games in a given month.

It could be argued that given the amount of money the Heavy VL Spenders typically dedicate to video lottery gambling each month ( $\approx \$800.00$ ), expenditures on other gaming activities should be substantially lower. While this is true ( $\approx \$120.00$  versus  $\$800.00$ ), it is noteworthy that expenditures on other gambling by these Heavy VL Players, on average, are at least twice as high as noted for any other VL player segment ( $\approx \$120.00$  versus  $\approx \$40.00 - \$60.00$ ), and exceeds Non-VL Players by a factor of five ( $\approx \$23.00$ ). Despite this almost linear increase in expenditures for other games of chance, Heavy VL Spenders are still allocating the majority (87%) of their gambling dollars to VL play, as compared to 50% or less by those VL players spending at lower levels.

One of the questions AGA wishes to address is, if VLT's were not available, would the gambling expenditure of VL players be reduced or diverted.

**Under such circumstances, the evidence of this current analysis suggests that, depending upon the level and extent of involvement in video lottery gambling, an increase in other gambling expenditures would be expected. Although it should be noted that, given the current strategies for other gaming options available in Nova Scotia, it is highly unlikely that diverted expenditures would reach the levels noted for video lottery.**

The reasons for this position are largely due to the nature of video lottery versus other games of chance played for money in Nova Scotia. Video lottery play is very different from other regulated gaming options such as lottery draws, bingo, sports betting, horse racing, casino gaming, which are most often tied to narrow and/or restricted play times or schedules and/or locations for play. Generally, there is a delay between the actual expenditure and the outcome. These factors directly influence play levels and exert control on expenditures (i.e., amount that is spent). Video lottery,

however, is continuous, accessible and the schedule of play, for the most part, is self-imposed, with no definable start/finish time for play within the prescribed hours of operation for licensed establishments in Nova Scotia. Small amounts are wagered each play or "spin" (e.g., \$2.50 or less per spin), with wins or losses accrued on a per play/spin basis. Therefore, the total amount wagered and/or spent on VLT's are unknown until the individual is finished playing. Sometimes, even then, given reinvestment of winnings in on-going play, the individual is unaware of the actual amounts expended in VL play.

Unlike sports betting, horse racing or some casino table games, there is no element of skill which can be acquired to enhance one's chances of winning. Nor can feedback from the game outcomes (i.e., wins/losses) for video lottery be used effectively by the players to evaluate and adjust their play strategies. Essentially, similar to lottery tickets, the odds of winning are random when playing VLT's, despite the illusions of control implied by some of the game's features (i.e., stop buttons, bet options) and the player's experience with the games. While it is possible to lose more when playing some VL games such as poker or cards games, it is not possible to increase the odds of winning. However, with a 95% pay-out per spin/play, the "win experience" with video lottery is more frequent than for any other form of gaming. Players will win often enough to believe it is related to their behaviour (e.g., something they have done), and these continuous, random intermittent wins reinforce and support on-going play.

Arguably, instant lottery tickets can be considered continuous in nature, yet, at this time, you must first purchase the ticket, determine the outcome, and then elect to buy again or not. Thus, involvement in on-going instant ticket play is mitigated by the need to involve a third party in the transaction, in this case a lottery ticket retailer.

While the configuration of video lottery is almost identical to slot machines, the slot machines are only available in two restricted locations in Nova Scotia versus approximately 3,000 VLT's distributed throughout the province.

As a result, the relationship between VLT expenditures and other gambling expenditures, as identified in the current analysis, are impacted to some extent by accessibility, seasonality and distribution strategies for the other gaming activities.

For all analyses, there was a positive association among expenditures on VLT's and lottery games (instant tickets and draws), casino slot machines and table games, and "other" forms of gaming, including both regulated and non-regulated activities (charity raffles/draws, horse races, cards/card games for money outside the casino, and/or any other types of betting/gambling excluding VLT's). The primary exceptions to this relationship are bingo and, to a lesser extent, sports betting, although VL players, regardless of expenditures, are more likely to engage in these activities and spend at higher levels than non-VL players. In the case of bingo and sports betting, it was speculated that extraneous factors may be exerting a capping effect on the amount that typically can be wagered by players. Such factors for sports betting may include limits imposed on maximum bets (i.e., sports pools to which everyone contributes a set amount), the seasonal availability of preferred sports or play off betting activity. For bingo, there is typically a set time in which to engage in the activity (i.e., 7:00 pm to 10:00 pm), at specified locations, with space or other factors limiting the number of "cards" which can reasonably be played at the same time. In addition, it could be argued that the social aspect of these types of gaming, as well as the role of knowledge and/or implied skill based reasoning for sports betting differentiate these types of gaming from video lottery. However, if either of these gaming options should become readily accessible in a continuous gaming format (i.e., satellite/TV bingo, simulcast sports betting, virtual horse racing), the relationship with VL expenditures may be considerably strengthened.

In fact, this is likely true for almost all other forms of gaming in Nova Scotia. Should any type of gaming be modified to improve player accessibility and exclude some or all of the features which exert control on expenditures, it could be expected that the revenues subsequently derived from the activity would increase dramatically (albeit from a small and distinctive segment of the playing population).

For example, the strong association between slot machines and VLT's is probably a reflection of the extent to which the games are alike. Given the similarity of the new generation of slot machines to VLT's, it appears that the primary distinctions between these two types of gaming are accessibility and distribution. (Although it should be noted that, at present, there is strong player preference for VLT's over the perceived to be "less interactive" slot machines.)

Similar scenarios could be considered for lottery tickets such as changing Lotto 6/49 to an on-line draw schedule of every five minutes rather than twice a week, or offering players uninterrupted on-line virtual play of instant tickets.

At the present time, given the higher involvement levels with other gaming, in the absence of VLT's, the players would likely increase their expenditure on these other types of games, most notably slot machines and lottery tickets. However, due to the current strategies in place for such alternative gaming, it would be almost impossible to divert even the majority of their collective VL expenditures towards other regulated gambling available in the province.

In summary, the current analyses underscores the strong association between VLT expenditures and other gambling expenditures. Overall, 12% of the variance in expenditures on other gambling activities is explained by the amount spent on VLT's. This association is even stronger when examined for specific games of chance such as casino gaming and slot machines. Thus, while VL expenditure is predictive of other gambling expenditures, we do not know, at this point, if it is the single most predictive factor. Additional analysis could answer this question by examining the role of VL expenditure among other factors such as problem play, gender, income, other demographic characteristics, as well as attitudes and perceptions.

Regardless, the evidence suggests, collectively, that VLT players are highly involved in other gambling activities and there is a direct relationship

between the degree of their involvement with and expenditure on video lottery and other games of chance.



# Appendix K



With a budget of \$5 million, the National Gambling Impact Study Commission was given a two-year mandate by U.S. President Bill Clinton to study the state of gambling in America. The 73 recommendations included in the Commission's final report cover a wide range of topics from regulation of the various gaming industries to the state of social and economic impact research. While some of the findings are applicable only in U.S.-based jurisdictions, many of the principles and suggestions can or are being applied elsewhere. Below is an assessment of the 73 recommendations from a Nova Scotia perspective.

The first series of recommendations cover the general regulation of varying forms of gambling and ways in which government oversight can be improved:

U.S. Commission Recommendation	N.S. Current Status	N.S. Outlook
3.1 The Commission recommends to state governments and the federal government that states are best equipped to regulate gambling within their own borders with two exceptions-tribal and internet gambling.	Section 207 of the Criminal Code of Canada effectively establishes Provincial jurisdiction over gambling in Canada. First Nations' gambling and internet gambling are subject to the Criminal Code.	Amendments to the Criminal Code may be necessary in the future to better address internet gambling.
3.2 The Commission recommends that all legal gambling should be restricted to those who are at least 21 years of age and that those who are under 21 years of age should not be allowed to enter areas where gambling activity occurs.	19 is the age of majority in Nova Scotia. Generally, gambling is restricted to persons 19 years of age and over except in charitable gambling instances such as raffles and bingo.	Regulatory changes ought to be forthcoming making it a violation to sell to or allow gambling opportunities by individuals under the age of 19.
3.3 The Commission recommends that gambling "cruises to nowhere" should be prohibited unless the state from which the cruise originates adopts legislation specifically legalizing such cruises consistent with existing law.	These types of cruises do not occur in Nova Scotia. Section 207.1 of the Criminal Code makes express provisions for "international cruise ships" entering Canadian waters; the voyage being at least 48 hours in duration.	No changes anticipated.
3.4 The Commission recommends that warnings regarding the dangers and risks of gambling, as well as the odds where feasible, should be posted in prominent locations in all gambling facilities.	Casinos and VLTs post warnings regarding the dangers and risks of gambling as well as available gambling help lines. Lottery tickets generally set out the odds of winning on the back of tickets.	The Province could benefit from increased public service ads detailing gambling risks and identifying help service providers. Bingo paper and lottery ticket outlet displays could be similarly enhanced.
3.5 The Commission recognizes the difficulty of campaign finance reform in general and an industry-specific contribution restriction in particular. Nonetheless, the Commission believes that there are sound reasons to recommend that states adopt tight restrictions on contributions to state and local campaigns by entities-corporate, private, or tribal-that have applied for or have been granted the privilege of operating gambling facilities.	The electoral laws, both Federally and Provincially, contain strict provisions identifying contributions. Furthermore all gambling operations in Nova Scotia are restricted to government, charitable and religious organizations making this situation markedly different.	No changes anticipated.

3.6 The Commission received testimony that convenience gambling such as electronic devices in neighborhood outlets, provides better economic benefits and creates potentially avoidable costs by making gambling more available and accessible. Therefore, the Commission recommends that states should not authorize any further convenience gambling operations and should cease and not back existing operations.	Electronic devices are limited to age restricted liquor licensed premises. Furthermore the VLT Moratorium Act prohibits increases in the number of these devices.	Bingos and lotteries and other forms of convenience gambling ought to be similarly age restricted.
3.7 The Commission recommends that the betting on collegiate and amateur athletic events that is currently legal be banned altogether.	Such betting in Canada is presently illegal.	No changes anticipated.
3.8 The Commission recommends that in states where there is little regulatory oversight for organizations contracted to help manage or supply the lottery, states should put all individuals, entities, and organizations involved with managing or supplying the lottery through a rigorous background check and licensing process.	In Nova Scotia extensive background checks are presently conducted on the regulatory staff of the Alcohol and Gaming Authority, all staff of the Gaming Corporation, all casino staff and gaming related suppliers.	Continuation of present procedures.
3.9 The Commission recommends to states with lotteries that the states should publicly develop and review model regulations for their lottery in the form of "best practices", designed to be adopted legislatively.	The administration of Nova Scotia's lotteries is currently being reassessed by Government which will decide if the work should be repatriated to Nova Scotia from the ALC.	Regulations to govern the operation of the lotteries by the Nova Scotia Gaming Corporation are presently being developed.
3.10 The Commission urges states with lotteries to disallow instant games that are simulations of live card and other casino-type games. Generally, the outcome of an instant game is determined at the point of sale by the lottery terminal that issues the ticket.	In Nova Scotia instant tickets are presently all non-electronic and not simulations of casino type games.	No changes anticipated.
3.11 The Commission recommends that all relevant governmental gambling regulatory agencies should ban aggressive advertising strategies, especially those that target people in impoverished neighborhoods or youth anywhere.	As of March 19, 1999 the North American Association of State and Provincial Lotteries had developed a list of standards for member lotteries.	Provincial standards for the control of advertising and marketing should be developed and adopted in Nova Scotia.
3.12 The Commission recommends that states should refuse to allow the introduction of casino-style gambling into pari-mutual facilities for the primary purpose of saving a pari-mutual facility that the market has determined no longer serves the community or for the purpose of competing with other forms of gambling.	The Harness racing facilities in Nova Scotia are presently being managed by the lottery operator. Under present regulations any VLT's would be restricted to the age restricted liquor licensed facility at such tracks.	No changes anticipated.

<p>3.13 The Commission recommends that state and tribal governments, the NCAA, and other youth, school, and collegiate athletic organizations that, because sports gambling is popular among adolescents and may act as a gateway to other forms of gambling, such organizations and governments should fund educational and prevention programs to help the public recognize that almost all sports gambling is illegal and can have serious consequences. The Commission recommends that this effort should include public service announcements, especially during tournament and bowl game coverage. The Commission recommends that the NCAA and other amateur sports governing bodies adopt mandatory codes of conduct regarding sports gambling education and prevention. The Commission also calls upon the NCAA to organize U.S. research universities to apply their resources to develop scientific research on adolescent gambling, sports gambling, and related research.</p>	<p>In Nova Scotia legal sports betting is limited to the Pro-Line game controlled by the lottery operator. The lottery operator is owned by the Provincial government and the Provincial government, through various agencies, conducts education, research, prevention and help programs.</p>	<p>Continuation of existing policies and activities with a focus on youth problem gambling</p>
<p>3.14 The Commission recommends that each gambling operation, state lottery, tribal government, and associations of gambling organizations voluntarily adopt and then follow enforceable advertising guidelines. These guidelines should avoid explicit or implicit appeals to vulnerable populations, including youth and low-income neighborhoods. Enforcement should include a mechanism for recognizing and addressing any citizen complaints that might arise regarding advertisements. Additionally, the Commission recommends that Congress amend the federal truth-in-advertising laws to include Native American gambling and state-sponsored lotteries.</p>	<p>As of March 18, 1999 the North American Association of State and Provincial Lotteries had developed a list of standards for member lotteries.</p>	<p>Provincial standards for the control of advertising and marketing of gambling should be developed and adopted in Nova Scotia.</p>
<p>3.15 The Commission recommends that the Congress should delegate to the appropriate federal agency the task of annually gathering data on gambling lottery operations in the U.S. including volume of purchases, demographics of lottery players and patterns of play by demographics, nature, content accuracy and type of advertising spending, problem and pathological gamblers, spending on regulation, and other relevant matters.</p>	<p>The Alcohol and Gaming Authority is presently mandated to carry on continuous studies of gambling operations in Nova Scotia. Such studies would include lottery operations.</p>	<p>New regulations should provide for collection of more demographic information and for advertising standards.</p>
<p>3.16 The Commission recommends that states and tribal governments should conduct periodic reassessments of the various forms of gambling permitted within their borders for the purpose of determining whether the public interest would be better served by limiting, eliminating, or expanding one or more of those forms.</p>	<p>The Alcohol and Gaming Authority is asked to assess economic impact and public interest. It reports annually.</p>	<p>No changes anticipated</p>

3.17 The Commission recommends that federal, state, and tribal gambling regulators should be subject to a cooling-off period that prevents them from working for any gambling operation subject to their jurisdiction for a period of 1 year. Federal, state, or tribal lottery employees should be subject to a cooling-off period that prevents them from working for any supplier of lottery services for a period of 1 year.	Employees of the Alcohol and Gaming Authority are subject to restrictions regarding subsequent employment pursuant to the <i>Members and Public Employees Disclosure Act</i> .	No changes anticipated
3.18 The Commission recommends that jurisdictions considering the introduction of new forms of gambling or the significant expansion of existing gambling operations should sponsor comprehensive gambling impact statements. Such analyses should be conducted by qualified independent research organizations and should encompass, in so far as possible, the economic, social, and regional effects of the proposed action.	In Nova Scotia new forms of gambling would primarily be conducted by the government through its Crown corporation, the Nova Scotia Gaming Corporation, and all such initiatives would generally be accompanied by independent feasibility research. Issues surrounding the impact of new forms of gambling would be reviewed by the Alcohol and Gaming Authority.	Consideration be given to feasibility impact studies prior to initiation of new gaming activities.
3.19 The Commission recommends that states with lotteries reduce their sales dependence on low-income neighborhoods and heavy players in a variety of ways, including limiting advertising and number of sales outlets in low-income areas.	In Nova Scotia there presently exists very little demographic information to suggest low income neighborhoods are disproportionately targeted for gaming initiatives.	More detailed study in this area is recommended and corrective action needs to be taken, if necessary.
3.20 The Commission recommends that states with lotteries create a private citizen oversight board. The board would make data-based policy decisions on types of games to offer, marketing strategies to follow, etc.	The government operated lottery presently performs these functions internally.	New regulations should provide that the Alcohol and Gaming Authority serve as the oversight organization for Provincial lottery operations.
3.21 The Commission recognizes that lotteries and convenience gambling may play a significant role in the development of youthful gamblers. Further, with respect to all forms of legal and illegal gambling, the Commission recommends that all relevant governmental gambling regulatory agencies enact and enforce harsh penalties for abuse in this area involving underage gamblers. Penalties and enforcement efforts regarding underage gambling should be greatly increased.	Again the Alcohol and Gaming Authority recommends that regulations provide penalties for people who sell, or facilitate sales, to underage players.	As mentioned in 3.2, regulatory changes ought to be forthcoming making it a violation to sell to or allow gambling opportunities to individuals under the age of 19.
3.22 Heavy governmental promotion of lotteries, largely located in neighborhoods, may contribute disproportionately to the culture of casual gambling in the U.S. The Commission therefore recommends that states curtail the growth of new lottery games, reduce lottery advertising, and limit locations for lottery machines.	In Nova Scotia there presently exists very little demographic information to suggest low income neighborhoods are disproportionately targeted for gaming initiatives.	More detailed study in this area is required and corrective action needs to be taken, if necessary.

*Regulation and programming aimed at treatment and prevention of problem and/or pathological gambling:*

U.S. Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>4.1 The Commission respectfully recommends that all relevant governmental gambling regulatory agencies require as a condition of any gambling facility's license to operate that each applicant:</p> <ul style="list-style-type: none"> <li>- Adopt a clear mission statement on problem and pathological gambling.</li> <li>- Appoint an executive of high rank to execute it.</li> <li>- Train management and staff.</li> <li>- Under a state "hold harmless" statute, refuse service to any customer whose gambling behaviour convincingly exhibits indications of problem or pathological gambling.</li> <li>- Provide the customer (as described above) with written information that includes a state-approved list of professional gambling treatment programs and state-recognized self-help groups.</li> <li>- Makes available medical treatment for problem and for pathological gambling facility employees.</li> </ul>	<p>In Nova Scotia, gaming regulations expressly prohibit service to anyone who exhibits signs of problem gambling. In addition, the casino operator has developed a mission statement regarding the matter and an operating team that administers it. The operator continues to train its staff on that policy and to provide pamphlets throughout the casinos that refer problem gamblers to assistance. Under the operator's benefits plan, permanent employees and part-time employees with 32 hours per week have access to assistance/treatment programs; casual employees do not. It also participates in an annual Responsible Gaming Education Week public awareness campaign organized by the American Gaming Association each August.</p>	<p>Other agencies are encouraged to adopt similar recommendations, and in some circumstances should be mandated to do so.</p>

<p>4.2 The Commission recommends that each state and tribal government enact, if it has not already done so, a Gambling Privilege Tax, assessment, or other contribution on all gambling operations within its boundaries, based upon the gambling revenues of each operation. A sufficient portion of such monies shall be used to create a dedicated fund for the development and ongoing support of problem gambling-specific research, prevention, education, and treatment programs. The funding identified for these purposes shall be sufficient to implement the following goals:</p> <ul style="list-style-type: none"> <li>- Undertake biennial research by a nonpartisan firm, experienced in problem gambling research, to estimate the prevalence of problem and pathological gambling among the general adult population.</li> <li>- Initiate public awareness, education, and prevention programs aimed at vulnerable populations.</li> <li>- Identify and maintain a list of gambling treatment services available from licensed or state-recognized professional providers, as well as the presence of state recognized self-help groups.</li> <li>- Establish a demographic profile for treatment recipients and services provided, as state and federal laws permit. Develop a treatment outcome mechanism that will compile data on the efficacy of varying treatment methods and services offered, and determine whether sufficient professional treatment is available to meet the demands of persons in need.</li> <li>- When private funding is not available, subsidize the costs of approved treatment by licensed or state-recognized gambling treatment professionals for problem and pathological gamblers, as well as adversely affected persons.</li> </ul>	<p>In Nova Scotia, earnings of legal gambling are automatically forwarded to government through the Nova Scotia Gaming Corporation not to private interests, therefore no taxation as such is required. This arrangement ensures that monies are dedicated to ongoing support of problem gambling-related research, prevention, education, and treatment. Video lottery terminal stakeholders and Gaming Corp. revenues support the Nova Scotia Gaming Foundation and the casino operators forward \$1 million each year to the Nova Scotia Department of Health. In addition, the Alcohol and Gaming Authority conducts ongoing studies of the effects of gambling and has created this year a list of gambling treatment services available in the province.</p>	<p>Further work needs to be undertaken to evaluate the efficacy, availability and outcome of various treatment programs in the province.</p>
<p>4.3 Despite the fact that pathological gambling is a recognized medical disorder most insurance companies and managed care providers do not reimburse for treatment. The Commission recommends to states that they mandate that private and public insurers and managed care providers identify successful treatment programs, educate participants about pathological gambling and treatment options, and cover the appropriate programs under their plans.</p>	<p>The Alcohol and Gaming Authority conducts ongoing studies of the effects of gambling and has created this year a list of gambling treatment services available in the province.</p>	<p>Further work needs to be undertaken to evaluate the efficacy, availability and outcome of various treatment programs in the province.</p>

4.4 The Commission recommends that each gambling facility must implement procedures to allow for voluntary self-exclusion, enabling gamblers to ban themselves from a gambling establishment for a specified period of time.	Casinos in the Province have implemented these procedures. The Alcohol and Gaming Authority has recommended the implementation of these procedures in the past for VLTs.	Regulations could be developed to extend self-exclusion programs to all forms of gambling.
4.5 The Commission recommends encouraging private volunteerism of groups and associations working across America to solve problem gambling, especially those involving practitioners who are trying to help people who are problem gamblers. This should include strategically pooling resources and networking on the lists of recommendations these organizations have presented to the Commission, and working to develop uniform methods of diagnosis.	There are a number of private volunteer groups in the area, however, the groups do not appear to be involved in the forefront: solving of problem gambling, rather more in treatment. Some of the groups receive encouragement through the Gaming Foundation.	No changes anticipated other than ongoing monitoring.
4.6 The Commission recommends that each state-run or approved gambling operation be required to conspicuously post and disseminate the telephone numbers of at least two state-approved providers of problem-gambling information, treatment, and referral support services.	Required Department of Health help numbers are posted on VLT machines and posted throughout the casinos in the Province on the LEDS. The help numbers are posted in lottery outlets.	There are plans to eventually put the help numbers on bingo paper.

**Recommendations regarding the impact of technology on gambling trends:**

U.S. Commission Recommendation	N.S. Current Statute	N.S. Outlook
5.1 The Commission recommends to the President, Congress, and the Department of Justice (DOJ) that the federal government should prohibit, without allowing new exemptions or the expansion of existing federal exemptions to other jurisdictions, Internet gambling not already authorized within the U.S. or among parties in the U.S. and any foreign jurisdiction. Further, the Commission recommends that the President and Congress direct DOJ to develop enforcement strategies that include, but are not limited to, Internet service providers, credit card providers, money transfer agencies, makers of wireless communications systems, and others who intentionally or unintentionally facilitate Internet gambling transactions. Because it crosses state lines, it is difficult for states to adequately monitor and regulate such gambling.	Internet gambling to the extent that it crosses Nova Scotia boundaries is a Canadian Criminal Code matter. Internet gambling within Nova Scotia boundaries would be a Provincial matter. Furthermore the operation of electronic gambling would be carried on by the Provincial Government and any such gambling would be illegal without Federal or Provincial consent.	Amendments to the Criminal Code may be necessary to better deal with all forms of Internet gambling. Effective regulation might better address concerns than the prohibitions Nova Scotia should consider legislative initiatives in relation to credit cards and money transfer agencies.
5.2 The Commission recommends to the President, Congress, and state governments the passage of legislation prohibiting wire transfers to known Internet gambling sites, or the banks who represent them. Furthermore, the Commission recommends the passage of legislation stating that any credit card debts incurred while gambling on the Internet are unrecoverable.	As mentioned above the Criminal Code already prohibits Internet gambling. Credit cards would only be part of the difficulty, however, debit cards may be more problematic.	Legislative initiatives should be investigated at both Federal and Provincial levels because of the nature of banking and telecommunications.

<p>5.3 The Commission recognizes that current technology is available that makes it possible for gambling to take place in the home or the office, without the participant physically going to a place to gamble. Because of the lack of sound research on the effects of these forms of gambling on the population and the difficulty of policing and regulating to prevent such things as participation by minors, the Commission recommends that states not permit the expansion of gambling into homes through technology and the expansion of account wagering.</p> <p>5.4 The Commission recommends to the President and Congress that because Internet gambling is expanding most rapidly through offshore operators, the federal government should take steps to encourage or enable foreign governments not to harbor Internet gambling organizations that prey on U.S. citizens.</p>	<p>Nova Scotia has exclusive jurisdiction in this matter.</p>	<p>Continuation of policies aimed at preventing gambling by minors.</p>
	<p>Joint Federal and Provincial legislation do not allow operators to be registered in Canada.</p>	<p>As mentioned before, Federal and Provincial legislation may wish to consider legislative initiatives or amendments.</p>

*Although legislative differences make it difficult for direct comparisons between Native American Tribal Gaming and the gaming of First Nations' groups in Nova Scotia, the principles of NGISC's 15 recommendations on this subject may be analyzed:*

U.S. Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>6.1 The Commission acknowledges the central role of the National Indian Gaming Commission (NIGC) as the lead federal regulator of tribal governmental gaming. The Commission encourages the Congress to assure adequate NIGC funding for proper regulatory oversight to ensure integrity and fiscal accountability. The Commission supports the NIGC's new Minimum Internal Control Standards (MICS) developed with the help of the National Tribal Gaming Commissioners and Regulators, as an important step to ensure such fiscal accountability. The Commission work recommends that all Tribal Gaming Commissions work ensure that the tribal gaming operations they regulate meet or exceed these Minimum Standards, and that the NIGC focus special attention on tribal gaming operations struggling to comply with these and other regulatory requirements.</p>	<p>Nova Scotia has individual gaming agreements for 10 of the 13 First Nations' authorities in Nova Scotia. Those agreements generally establish the adoption by the Band Gaming Commissions of First Nations' the regulations enfolded in Nova Scotia.</p>	<p>The Band Gaming Commissions should continue to be encouraged to adopt and enforce equivalent gaming standards and regulations.</p>



<p>6.2 The Commission recommends that GRA's classes of gambling be clearly defined so that there is no confusion as to what forms of gambling constitute Class II and Class III gambling activities. Further, the Commission recommends that Class III gambling activities should not include any activities that are not available to other persons, entities or organizations in a state, regardless of technological similarities. Indian gambling should not be inconsistent with the state's overall gambling policy.</p>	<p>The First Nations' gaming activities do not include gaming activities that are not available elsewhere in the Province.</p>	<p>The Band Gaming Commissions should continue to be encouraged to adopt and enforce equivalent gaming standards and regulations.</p>
<p>6.3 The Commission recommends that labor organizations, tribal governments, and states should voluntarily work together to ensure the enforceable right of free association-including the right to organize and bargain collectively-for employees of tribal casinos. Further, the Commission recommends that Congress enact legislation establishing such worker rights only if there is not substantial voluntary progress toward this goal over a reasonable period of time.</p>	<p>Presently not applicable to Nova Scotia.</p>	
<p>6.4 The Commission recommends that tribal governments, states and, where appropriate, labor organizations, should work voluntarily together to extend to employees of tribal casinos the same or equivalent (or superior) protections that are applicable to comparable state or private-sector employees through federal and state employment laws. If state employee protections are adopted as the standard for a particular tribal casino, then they should be those of the state in which that tribal casino is located. Further, the Commission recommends that Congress should enact legislation providing such protections only if there is not substantial voluntary progress toward this goal over a reasonable period of time.</p>	<p>Presently not applicable to Nova Scotia.</p>	
<p>6.5 The Commission recognizes that under GRA, Indian tribes must annually report certain proprietary and non-proprietary tribal gambling financial information to the NIGC, through certified, independently audited financial statements. The Commission recommends that certain aggregated financial, Indian gambling data from reporting tribal governments, comparable by class to the aggregated financial data mandatorily collected from commercial casinos and published by such states as Nevada and New Jersey, should be published by the NIGC annually. Further, the Commission recommends that the independent auditors should also review and comment on each tribal gambling operator's compliance with the MICS promulgated by the NIGC.</p>	<p>Gaming agreements between individual bands and the Province call for the creation of Native Gaming Commissions to oversee gambling on reserves. The agreements further contemplate the need for each Native Gaming Commission to provide to the Province annual independent audits and records, including financial reports, of licensed operations. Such commissions may be in operation, no public accounting of their activities are available.</p>	<p>If the Province is to assess the real social and economic effects of gambling, there is a need for all gaming-related proceeds to be monitored and for an equitable approach to enforcement and regulation that respects First Nations' sovereignty. This allows the Province to understand the broader implications of gaming through standard measurements.</p>

6.6 The Commission recommends that, upon written request, a reporting Indian tribe should make immediately available to any enrolled tribal member the annual, certified, independently audited financial statements and compliance review of the MICS submitted to the NIGC. A tribal member should be able to inspect such financial statements and compliance reviews at the tribal headquarters or request that they be mailed.	Nova Scotia agreements protect the sovereignty of the First Nations' lands.	If the Province is to assess the real social and economic effects of gambling, there is a need for an gambling-related proceeds to be monitored and for an equitable approach to enforcement and regulation that respects First Nations' sovereignty yet allows assessment of the broader implications of gaming through standard measurements.
6.7 The Commission recommends that tribal and state sovereignty should be recognized, protected, and preserved.	Because of the gaming agreements, Nova Scotia recognizes the protection and preservation of First Nations' gaming on their lands.	No changes anticipated.
6.8 The Commission recommends that all relevant governmental gambling regulatory agencies should take the rapid growth of commercial gambling, state lotteries, charitable gambling, and Indian gambling into account as they formulate policies, laws, and regulations pertaining to legalized gambling in their jurisdictions. Further, the Commission recommends that all relevant governmental gambling regulatory agencies should recognize the long overdue economic development Indian gambling can generate.	Because of First Nations' gaming agreements, Nova Scotia recognizes native jurisdiction on their lands and the opportunity to partake in revenues.	Native Gaming Commissions should continue to be encouraged to file adequate reports so full extent of gambling endeavors are understood.
6.9 The Commission has heard substantial testimony from tribal and state officials that unopposed tribal gambling has resulted in substantial litigation. Federal enforcement has, until lately, been mixed. The Commission recommends that the federal government fully and consistently enforce all provisions of the IGRA.	10 out of the 13 First Nations have gaming agreements.	Continue attempts to have all 13 First Nations' communities working under gaming agreements.
6.10 The Commission recommends that tribes, states, and local governments should continue to work together to resolve issues of mutual concern rather than relying on federal law to solve problems for them.	Because of First Nations' gaming agreements there is a high level of involvement between the Province and the Native Gaming Commissions.	Continue efforts in this regard.
6.11 The Commission recommends that gambling tribes, states, and local governments should recognize the mutual benefits that may flow to communities from Indian gambling. Further, the Commission recommends that tribes should enter into reciprocal agreements with state and local governments to mitigate the negative effects of the activities that may occur in other communities and to balance the rights of tribal, state and local governments, tribal members, and other citizens.	Because of the gaming agreements there is a high level of involvement between the Province and the Native Gaming Commissions.	Continue efforts in this regard.

6.12 IGRA allows tribes and states to negotiate any issues related to gambling. Nothing precludes voluntary agreements to deal with issues unrelated to gambling either within or without compacts. Many tribes and states have agreements for any number of issues (e.g., taxes, zoning, environmental issues, natural resources management, hunting and fishing, etc.). The Commission recommends that the federal government should leave these issues to the states and tribes for resolution.	The Nova Scotia Department of Aboriginal Affairs deals consistently on these matters.	Matters of negotiation between the Province and the Native Gaming Commissions to continue
6.13 The Commission recommends that Congress should specify a constitutionally sound means of resolving disputes between states and tribes regarding Class III gambling. Further, the Commission recommends that all parties to Class III negotiations should be subject to an independent, impartial decisionmaker who is empowered to approve compacts in the event a state refuses to enter into a Class III compact, but only if the decisionmaker does not permit any Class III games that are not available to other persons, entities, or organizations of the state and only if an effective regulatory structure is created.	Each gaming agreement has a resolution mechanism attached to it.	No changes anticipated.
6.14 The Commission recommends that Congress should adopt no law altering the right of tribes to use existing telephone technology to link bingo games between Indian reservations when such forms of technology are used in conjunction with the playing of Class II bingo games as defined under IGRA.	First Nations' gaming agreements do not currently include electronic gaming.	The type of electronic gaming remains with the Provincial Government
6.15 The Commission recommends that tribal governments should be encouraged to use some of the net revenues derived from Indian gambling as "seed money" to further diversify tribal economies and to reduce their dependence on gambling.	First Nations' revenues fall under the gaming agreements between the Province and the Native Gaming Commissions and the revenues generated are used for band matters.	No changes anticipated.

*The Commission, like many other research bodies before it, has concluded that measuring the social and economic effects of gambling on a nation is "an immensely complicated issue." While some of its conclusions may be specific to U.S. concerns, it advocates assessments and reaches conclusions:*

U.S. Commission Recommendation	N.S. Current Status	N.S. Outlook
7.1 Because the easy availability of automated teller machines (ATMs) and credit machines encourages some gamblers to wager more than they intended, the Commission recommends that states, tribal governments, and pari-mutuel facilities ban credit card cash advance machines and other devices activated by debit or credit cards from the immediate area where gambling takes place.	In Nova Scotia's two casinos, ATMs and credit card advances by machines are available. Nova Scotia regulations allow for out-of-country pre-approved credit. Regulations prohibit advance credit to video lottery players and cash machines cannot be located within 15.24 meters of a video gaming device. Credit is not available for bingo, raffle and lottery ticket gaming.	This is an area that should be continued to be monitored. There will be control systems evolving for the granting of credit to out-of-province players and continued preclusion for the granting of credit to in-province players.

<p>7.2 While the Commission recognizes that the responsibility for children and minors lies first and foremost with parents, it recommends that gambling establishments implement policies to help ensure the safety of children on their premises and to prevent underage gambling. Policies that could be implemented include the following:</p> <ul style="list-style-type: none"> <li>- Post local curfews and laws in public areas and inform guests traveling with minors of these laws.</li> <li>- Train employees working in appropriate areas to handle situations involving underaged children, underage gambling, and alcohol and tobacco consumption or purchase.</li> </ul>	<p>The regulations in Nova Scotia prohibit minors in casinos. VLTs are operated in age-restricted liquor licensed premises. There is some confusion in relation to bingo gaming. These premises are required to do identification checks. Raffle tickets are being sold by minors. There are contractual obligations that have been developed in relation to lottery ticket gaming.</p>	<p>Regulatory improvements in relation to minors are being considered for bingo. Sales of lottery tickets to minors is an area where more regulatory prohibitions are being developed</p>
<p>7.3 The Commission recommends to state, local and tribal governments that (when considering the legalization of gambling or the repeal of gambling that is already legal) they should recognize that, especially in economically depressed communities, casino gambling has demonstrated the ability to generate economic development through the creation of quality jobs.</p>	<p>Nova Scotia consistently attempts to assess methods of determining the incremental or economic benefits of gambling. The economic merits of gambling continue to be disputed and continue to be a matter of debate.</p>	<p>The Nova Scotia Alcohol and Gaming Authority continues to measure and monitor.</p>
<p>7.4 The Commission recommends to state, local and tribal governments that (when considering the legalization of gambling or the repeal of gambling that is already legal) they should recognize that lotteries, internet gambling, and non-casino electronic gambling devices do not create a concentration of good quality jobs and do not generate significant economic development.</p>	<p>Nova Scotia consistently attempts to assess methods of determining the incremental or economic benefits of gambling. The economic merits of gambling continue to be disputed and continue to be a matter of debate.</p>	<p>As mentioned before, the Nova Scotia Alcohol and Gaming Authority continues to measure and monitor.</p>
<p>7.5 The Commission recommends to state, local and tribal governments that (when they are considering the legalization of casino gambling) casino development should be targeted for locations where the attendant jobs and economic development will benefit communities with high levels of unemployment and underemployment and a scarcity of jobs for which the residents of such communities are qualified.</p>	<p>There are two casinos in the Province, one is located in Halifax and the other in Sydney</p>	<p>There are no existing plans for any additional casinos in the Province</p>
<p>7.6 The Commission recommends to state, local and tribal governments that studies of gambling's economic impact and studies contemplating the legalization of gambling or the repeal of gambling that is already legal should include an analysis of gambling industry job quality, specifically income, medical benefits, and retirement benefits, relative to the quality of other jobs available in comparable industries within the labor market.</p>	<p>There are two casinos in the Province and the results of the two casino operations are included in any economic gambling assessments that are carried on in the Province.</p>	<p>No changes anticipated</p>

7.7 The Commission recommends to state, local and tribal governments that when planning for gambling-related economic development, communities with legal gambling or that are considering the legalization of gambling should recognize that destination resorts could create more and better quality jobs than casinos catering to a local clientele.	There are two casinos in the Province, one is located in Halifax and the other in Sydney.	As mentioned before, there are no existing plans for any additional casinos in the Province.
7.8 The Commission recommends to state, local and tribal governments that communities with legal gambling or that are considering the legalization of gambling should look to cooperation between labor unions and management as a means for protecting job quality.	Labour practices are regulated by Nova Scotia's labour law. Casino labour management issues are matters between employers and employees and the employee's rights to organize and negotiate are governed by the Trade Union Act.	No changes anticipated.
7.9 The Commission recommends that students should be warned of the dangers of gambling, beginning at the elementary level and continuing through college.	The Department of Education in Nova Scotia has curriculum videos and other literature. Focus group studies are carried on for under age gambling.	Continue to study and report

*In its report, the Commission bemoaned what it called a "dearth of impartial, objective research" on all aspects of legal gambling. In an overall position long advocated by the Authority, the Commission warns that such information and understanding, it says, is desperately needed for governments to properly shape public policies that are in the best interest of their citizens. Its specific recommendations:*

U.S. Commission Recommendation	N.S. Current Status	N.S. Outlook
8.1 The Commission recommends that Congress encourage the appropriate institutes within the National Institutes of Health (NIH) to convene a multi-disciplinary advisory panel that will help to establish a broad framework for research on problem and pathological gambling issues within its range of expertise.	Nova Scotia conducts some of the most comprehensive and wide-ranging research of gambling available.	No changes anticipated.

<p>8.2 The Commission recommends that Congress direct the Substance Abuse and Mental Health Services Administration (SAMHSA), or other appropriate agency, to add gambling components to the National Household Survey on Drug Abuse. To understand the expanding dimensions of problem gambling and pathological gambling nationwide, gambling prevalence studies need to be of sufficient volume and with annual updates to record changes brought about by expanding legalization, greater accessibility, technological advances and increasingly sophisticated games. The survey would examine not only the general population, but also sizable subgroups such as youth, women, the elderly and minority gamblers, if no other more appropriate longitudinal studies focusing on each of these groups are available.</p> <p>In any event, no data gathering pursuant to these recommendations should violate any person's right to medical privacy in seeking treatment for problem or pathological gambling.</p>	<p>The Nova Scotia Alcohol and Gaming Authority is presently moving towards identifying the nature, accessibility and availability of all problem gambling programs and services provided in the Province. In addition, it has been instrumental in interprovincial efforts to develop a definition of problem gambling and methodology for determining it in order to standardize provincial approaches to research.</p>	<p>Upon successful completion of the interprovincial task force's initiatives for standardization, it may be appropriate for federal authorities to undertake longitudinal studies or for Statistics Canada to gather data in its Family and Household Expenditures Index.</p>
<p>8.3 The Commission recommends that Congress direct all federal agencies conducting or supporting longitudinal research panels to consider the feasibility of adding a gambling component to such surveys and, where appropriate, entertain applications to add such components that are determined to be of high scientific merit through scientific peer review. In addition to addressing gambling behavior, these components should include questions about treatment-seeking behavior, in order to begin to address the issue of the unmet need for treatment, which is currently unknown.</p>	<p>As mentioned above, Nova Scotia was instrumental in initiating interprovincial efforts aimed at a definition and methodological approaches regarding problem gambling in Canada. Such standardization must be agreed upon before federal assessments are undertaken in order for these efforts to have any scientific merit or useful application.</p>	<p>While Nova Scotia recognizes the value of and need for longitudinal research, it also knows that this is an expensive, long-range method of gathering data that will be most useful at provincial and federal levels. A successful completion of the interprovincial task force's initiatives would allow for developing a standardized methodology and definition regarding problem gambling in Canada.</p>
<p>8.4 The Commission recommends that Congress encourage the NIH to issue a revision of the special research program announcement for research applications on pathological gambling to focus research designed to identify the age of initiation of gambling, influence of family and correlates with other youth high-risk behavior such as tobacco, alcohol and other drug use, early sexual activity and criminal activity evaluated separately for illegal and legal forms of gambling.</p>	<p>Several studies have been undertaken in Nova Scotia which assess such factors as the age of initiation of gambling, influence of family and other factors for co-occurrence as part of its ongoing assessments of problem gambling.</p>	<p>Nova Scotia will continue to conduct research into the influences that place individuals at risk for gambling problems. A spirit of improved co-operation is needed by the many agencies and private sector groups conducting assessments, however, in order that such research is not duplicated and that study outcomes are put to their most effective use.</p>

<p>8.5 The Commission recommends that Congress direct the appropriate initiatives of NIH to invite, where appropriate, applications for supplemental funds to add legal and gambling components of high scientific merit to appropriate and relevant existing surveys, and to issue a revision of the special program announcement for research applications on pathological gambling to include the following areas:</p> <ul style="list-style-type: none"><li>- Effects on family members, such as divorce, spousal and/or child abuse, severe financial instability and suicide.</li><li>- Analysis of public awareness education and prevention programs offered at federal, tribal, state or corporate levels.</li><li>- Analysis of the development of gambling difficulties associated with electronic gambling devices (EGDs) and the risk factors.</li><li>- Effects on the workplace</li><li>- A study that would establish reliable instruments to measure non-monetary costs associated with legal gambling including, without limitation, divorce, domestic violence, child abuse and chronic neglect, suicide, and the secondary effects of bankruptcy and gambling-related crimes, and other outcomes of a similar character.</li></ul>	<p>As part of its ongoing mandate, the Nova Scotia Alcohol and Gaming Authority conducts "a continuous study of the social, health, justice, economic and environmental impact of gambling in the province."</p>	<p>Nova Scotia will continue to conduct the research and gather the evidence needed for educated debate on the impact of gambling and of problem gambling. Its work could be bolstered by the successful completion of the interprovincial task force's efforts to develop the standardized definition and methodology that would, in turn, allow more reliable and consistent measurements</p>	<p>Such research will be ongoing</p>
<p>8.6 The Commission recommends that Congress direct the appropriate initiatives of NIH to invite, where appropriate, applications for supplemental funds to issue a revision of the special program announcement for research applications to commence a study of American adult problem gamblers below the pathological gambler threshold (APA DSM-IV). The gambling behavior of those in this large group of 11 million adults and juveniles reveal warning signs that require thorough analysis. The gamblers in this group could go either way, that is, toward diminishing risk or toward pathological status.</p>	<p>Studies of gamblers at risk are hampered by the lack of a Canadian-wide definition of problem gambling. That being said, Nova Scotia is already conducting studies, like the Department of Health's study assessing lapse VLT players, to identify the triggers and warning signs associated with difficulties and the steps that help diminish the risk.</p>		

<p>8.7 The Commission recommends that Congress direct the SAMHSA or other appropriate agency to add specific gambling questions to its annual surveys of mental health providers, which are conducted by the Center for Mental Health Services. The survey should map the availability of both primary and publicly funded treatment services for gamblers. This should include a count of treatment slots for gambling, how many, in a given period, are in treatment for gambling problems alone, or for multiple disorders that include problem gambling; a demographic profile of those receiving treatment; an assessment of the level of the gambling disorder, and a description of the services they are receiving. It would identify barriers to treatment, such as a lack of insurance coverage, exclusion of treatment for pathological gambling from HMO and other private insurance policies, stigmatization, or the lack of availability of treatment (including a lack of qualified treatment providers).</p>	<p>The Nova Scotia Alcohol and Gaming Authority has compiled a list of problem gambling treatment programs available in order to better measure their efficacy, availability and outcome</p>	<p>Include procedures at public and private caregiving programs could be implemented to better facilitate data gathering and effective, non-biased program evaluations of treatment offered</p>
<p>8.8 SAMHSA or another appropriate agency should initiate treatment outcome studies conducted by scientists in the treatment research field. Such studies should include formal treatment, self-help groups (Gamblers Anonymous) and natural recovery processes. These studies should encompass the general treatment population and should specifically include youth, women, the elderly and minority gamblers.</p>	<p>The Nova Scotia Alcohol and Gaming Authority has compiled a list of problem gambling treatment programs available in order to better measure their efficacy, availability and outcome</p>	<p>External evaluation of treatment providers should be based on criteria developed by independent scientific researchers in conjunction with the Nova Scotia Department of Health and other stakeholders</p>



<p>6.9 The Commission recommends Congress request the National Science Foundation to establish a multidisciplinary research program that will estimate the benefits and costs of legal and separately each form of legal gambling allowed under federal, tribal and/or state law, particularly lottery, casino, pari-mutual and convenience gambling. Further, the research program should include estimates of the costs and benefits of legal and illegal internet gambling, assuming Congress prohibits this form of gambling with certain exemptions. Such a program, at a minimum, should address the following factors:</p> <ul style="list-style-type: none"> <li>- Benefits associated with different kinds of legal and illegal gambling including increased income, creation of net new jobs and businesses, improvement in average wages and benefits, increased tax revenues, enhanced tourism and rising property values, and reductions in unemployment, if any.</li> <li>- Costs associated with different kinds of legal and illegal gambling, including problem and pathological gambling, increased crime, suicide, debts and bankruptcies, displacement of native inhabitants, traffic congestion, demand for more public infrastructure, demand for more public services from the courts (criminal, bankruptcy, divorce) and from schools, police and fire departments.</li> <li>- The study should include benefits derived or costs incurred not only in "host" communities or states in which gambling facilities are located, but also in so-called feeder communities or states in which a significant number of the gamblers live and work who patronize facilities in the host communities.</li> </ul>	<p>As part of its ongoing mandate, the Nova Scotia Alcohol and Gaming Authority conducts "a continuous study of the social, health, justice, economic and environmental impact" of gambling in the province. In addition, the Nova Scotia Department of Health and other agencies like the Tourism Industry of Nova Scotia engage in assessments of the impacts of gaming on Nova Scotians.</p>	<p>Nova Scotia conducts some of the most comprehensive and wide-ranging ongoing assessments of gambling available. The work could be made more efficient and cost-effective and the results more productive with better co-ordination of projects, studies and research undertaken.</p>
<p>6.10 The Commission recommends that Congress direct the National Institute of Justice (NIJ) or other appropriate agency to research what effect legal and illegal gambling has on property and/or violent crime rates. Such research should also examine whether gambling-related criminal activity is increased in neighboring jurisdictions where the arrest/gambling lives and/or works, but does not gamble.</p>	<p>As part of its ongoing mandate, the Nova Scotia Alcohol and Gaming Authority conducts "a continuous study" of the justice impact of gambling in the province. It is currently assessing the possibility of adding problem gambling indicators to justice data collected by the Province.</p>	<p>Nova Scotia's ongoing work in the study of justice-related issues will continue and could be bolstered by the successful completion of the interprovincial task force's efforts to develop standardized definition and methodology for national problem gambling issues.</p>

8.11 The Commission recommends that Congress direct NJ, the Bureau of Justice Statistics (BJS), or other appropriate agencies to add gambling components to ongoing studies of federal prison inmates, parolees, and probationers who manifest disorders that frequently coexist with pathological gambling.	As mentioned above, the Nova Scotia Alcohol and Gaming Authority is currently assessing the possibility of adding problem gambling indicators to justice data collected by the Province.	Until such time as intake data is properly collected and more standardized methodologies of defining problem gamblers are completed by the interprovincial task force, studies of co-morbidity would be premature.
8.12 The Commission recommends that Congress direct NJ or other appropriate agency to investigate and study the extent of legal participation in illegal gambling and all forms of legal gambling separately. Further, that the NJ school on sports betting in the nation, work cooperatively with school authorities at high school and college levels and recommend what effective steps should be taken by federal, state, and school authorities to avoid the corruption of collegiate and amateur sports and reverse steady increases in adolescent gambling.	Nova Scotia studied specific and varied aspects of youth and gambling in a 1993 prevalence study and in focus groups this past fiscal year. In addition, a separate study was conducted of youth in one metropolitan area and issues related to gambling were included in the data collected as part of the Nova Scotia Drug Use Survey of 1998.	Nova Scotia will continue to study the effects of gambling and youth and should use the exploratory work done to date to suggest more directed studies.
8.13 The Commission recommends that Congress direct the Department of Labor or other appropriate agency to research job quality in the gambling industry, as measured by income levels, health insurance coverage and affordability, pension benefits, job security and other similar indicators. The research should include a comparison between gambling jobs in a variety of communities and regions of the country. It should also compare job quality and availability in the gambling industry versus other comparable industries within those labor markets. Finally, it should also compare job quality at casinos with distinguishing characteristics, such as those that derive a significant part of their revenues from non-gambling components like hotels, food and beverage service, and shopping and entertainment (often referred to as destination reports) versus those dependent almost wholly on gambling revenues.	Nova Scotia continues to conduct research into the economic impacts of gambling. It has conducted no specific research into comparative qualities of jobs.	No changes anticipated
8.14 The Commission recommends that if Congress acts to prohibit internet gaming that it also requires NJ or other appropriate agency, 12 months after the effective date of the enabling statute, to measure its effects on the state for a period of 1 year. An estimate should be made of how such illegal internet betting continues, despite the statutory prohibition. The factors contributing to successful evasion of the prohibition should be discussed in detail. Recommendations to Congress as to methods of closing the channels used to evade the prohibition should be made.	Gambling on the Internet is prohibited under the Criminal Code of Canada.	While no change is anticipated, the Authority must also point out that it is also difficult to accurately quantify illegal activity on this front and, therefore, to estimate changes in activity levels due to any newly enforced prohibition.

8.15 The Commission recommends that Congress direct the appropriate institutes within NIH to invite, where appropriate, applications for supplemental funds to issue a revision of the special program announcement for research applications to commence a study of prevalence of problem and pathological gambling among gambling industry employees in all forms of legal gambling, including, without limitation, pari-mutuel, identity, casino and, where feasible, convenience-stop employees.	Two prevalence studies have been conducted in Nova Scotia in recent years but none has concentrated specifically or exclusively on employees in the gaming industry.	When more detailed information has been obtained about prevalence in the population at large, a study of problem gambling within the gaming industry might prove valuable. In addition to employees of casinos, the study should also include retailers of traditional lottery tickets, employees of bingo, VLT siteholders and perhaps those employed in businesses involved in high-risk market trading.
8.16 The Commission recommends that the appropriate institutes conduct research to determine if an analysis of available gambling patron data derived from banks and other credit agencies can assist in the identification of problem and pathological gamblers.	Gambling patron data collected by banks and/or debit/credit assistance agencies may be of interest and/or use in confirming general trends, but should not be used in isolation to identify or screen for high risk gamblers.	A clear and concise definition of and methodology for assessing problem gambling must be developed by the interprovincial task force before targeted approaches to high-risk gamblers can or should be undertaken. In addition, any plan that involves such methods should be carefully vetted for concerns regarding personal privacy issues.
8.17 The Commission respectfully recommends to state and tribal governments that they should authorize and fund every 2 years an objective study of the prevalence of problem and pathological gamblers among their state's residents by a nonpartisan research firm, whose work meets peer review standards. Specific focus on major sub-populations including youth, women, elderly and minority group gamblers should also be included. An estimate of prevalence among patrons at gambling facilities or outlets in each form of gambling should also be included.	Two prevalence studies have been completed in Nova Scotia in the past six years. The Nova Scotia Gaming Control Act specifically requires several ongoing studies of gambling and its effects on residents.	Prevalence studies provide a valuable snapshot of existence in a given, selected period of time. Their results, however, should be supplemented by the kind of directed research enabled by the more concentrated (and expensive) approaches of longitudinal studies. To better achieve the goals for research dollars spent, Nova Scotia should better co-ordinate its existing and future research initiatives.
8.18 The Commission recommends to state and tribal governments that they should authorize and fund research programs for those who are, or are likely to become, problem or pathological gamblers in their resident population.	Nova Scotia casinos, VLT siteholders and the Gaming Corporation currently operate under contracts and/or regulations that require them to contribute financially to research, prevention and treatment programs into problem gambling.	No changes anticipated.
8.19 The Commission recommends to state and tribal governments that they should require, as a condition of the granting of a license to operate a gambling facility, or to sell goods or services in a gambling facility, full cooperation in any research undertaken by the state needed to fulfill the legislative intent of the federal and state statutory policy.	The Government of Nova Scotia manages and conducts all legal gambling in the Province through the Gaming Corporation of Nova Scotia and its licensed agents. They, in turn, are licensed and regulated by the Alcohol and Gaming Authority which also conducts ongoing research into the social, health, justice, economic and environmental impacts of gambling.	No changes anticipated.

<p>8.20 The Commission recommends that state and tribal governments consider authorizing research to collect and analyze data that would assess the following gambling-related effects on customers and their families resident in their jurisdictions:</p> <ul style="list-style-type: none"> <li>- The extent to which gambling-related debt is a contributing factor to personal bankruptcies.</li> <li>- The extent to which gambling problems contribute to divorce, domestic violence, and child abuse and neglect.</li> <li>- The extent to which gambling problems contribute to incidents of suicide (or suicidal behaviors).</li> <li>- The number, types, and average monetary values of gambling-related crimes perpetrated for the primary purpose of gaining funds to continue gambling or to pay gambling debts.</li> <li>- The extent to which practices of some gambling facilities to provide free alcohol to customers while gambling, the placement of cash advance credit machines close to the gambling area, and the offer of similar inducements are likely to be significant factors in magnifying or exacerbating a gambling disorder.</li> </ul>	<p>As mentioned elsewhere, the Nova Scotia Alcohol and Gaming Authority conducts ongoing studies of the social, health, justice, economic and environmental impacts of gambling on Nova Scotia. The service of complimentary alcohol is restricted, by regulation, to confined area high-limit rooms in the Nova Scotia casinos. Regulations currently restrict the use of "inducements" in gaming of all sorts and set limitations for the placements of cash machines at VLT sites.</p>	<p>No changes are planned in the ongoing study of gambling impacts or in regulations affecting inducements to gamble. As mentioned earlier, the matter of cash advance and credit card machines in places where gambling is permitted would continue to be monitored in the interest of assessing any required regulatory changes.</p>
---	---	--



# Appendix L



# Australia's Gambling Industries, Draft Report

Unlike the United States' National Gambling Impact Study Commission, the Australia Productivity Commission's draft Australia's Gambling Industries report does not include a list of recommendations per se. A large portion of the report concentrates on findings of fact derived from national surveys and submissions (i.e., more than 80 per cent of adult Australians gamble; problem gamblers account for over \$3 billion of the nation's \$11 billion in losses last year). Still, the mammoth interim report includes enlightening information and warrants examination. To that end, scrutiny of the Commission's summary list of key findings and of each of the 21 chapters' lists of key messages has resulted in the following jurisdictional comparison.

## From the summary's key findings:

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>S.1 Because quantification of the costs and benefits of gambling industries is hazardous (the Commission's rough calculations found a range of net benefits of between \$150 million and \$5.2 billion depending on methodology), policy approaches need to be directed at reducing the costs of problem gambling – through harm minimization and prevention measures – while retaining as much of the benefit to recreational gamblers as possible.</p>	<p>In Nova Scotia, the Gaming Control Act addresses both the need for economic analysis and for harm minimization and prevention. The Nova Scotia Alcohol and Gaming Authority, the Nova Scotia Gaming Corporation and the Department of Health are engaged in studies of and efforts to expand responsible gaming initiatives that are aimed at harm minimization and prevention.</p>	<p>Although efforts at costing of problem gambling must continue to be explored, the Authority recognizes that, for the immediate future, policy initiatives should stay focused on harm minimization and prevention.</p>
<p>S.2 The current regulatory environment is deficient in many respects. Regulations are complex, fragmented and often inconsistent. This has arisen because of inadequate policy-making processes and strong incentives for governments to derive revenue from the gambling industries.</p>	<p>In Nova Scotia, gambling is regulated by the Canadian Criminal Code and by the Nova Scotia Gaming Control Act and associated regulations. Under terms of the Gaming Control Act, the Nova Scotia Gaming Corporation is responsible for the operation of all legal gaming in the Province while the Alcohol and Gaming Authority is responsible for enforcement, regulation and for specified research. Assessing gaming's impact it makes its recommendations for regulatory changes to Government in its Annual Report. Recommendations affecting the various forms of gambling have evolved over time. For example, bingo regulations and measures aimed at traditional games are being brought in better line with those relating to such recently introduced activities as casinos or video slot-mats.</p>	<p>The Alcohol and Gaming Authority will continue to monitor and measure the effectiveness of gaming regulations and makes its recommendations to Government in its annual report. It agrees with the Productivity Commission's call for transparency and clarity in the rules and policies. To this end, the Alcohol and Gaming Authority would like to see continued elimination of policies that have inconsistent objectives or that allow for variance in application.</p>
<p>S.3 Restrictions on competition have not reduced the accessibility of gambling other than for casino games. With the possible exception of casinos, such restrictions have little justification.</p>	<p>In Nova Scotia, as per the Canadian Criminal Code, all gaming is conducted by the Province, therefore matters relating to competition between providers is not an issue.</p>	<p>No change is anticipated.</p>

<p>3.4 Caps on gaming machine numbers can help reduce accessibility and thus problem gambling. However, more targeted consumer protection measures – if implemented – have the potential to be more effective, with less harm to recreational gamblers. (In its more detailed chapter summary of this item, the Commission points out that necessity is not just about proximity; it is also about the means of access and ease of use of the gambling activity, control of the gambling venue and the initial outlay required to gamble.)</p>	<p>Nova Scotia implemented a moratorium on video lottery terminals in 1999. This year, the Gaming Corporation also issued a Request for Proposals for new gaming machines that included a call for manufacturers to provide information on how the units can be made less appealing to problem gamblers but retain enjoyment for other users. In addition, the Nova Scotia Department of Health has been conducting a study aimed at assessing the perceived risk factors associated with the activity.</p>	<p>The Authority would like to see this trend toward more targeted consumer protection expanded and continue to investigate ways in which hardware, software and information can be combined to better provide timely help for problem gamblers.</p>
<p>3.5 Existing self-regulatory arrangements are inadequate to ensure the informed consent of consumers, or to ameliorate the risks of problem gambling. There are particular deficiencies in:</p> <ul style="list-style-type: none"> <li>-information about the "jack" and value of gambling products (especially gaming machines)</li> <li>-information about the risks of problem gambling</li> <li>-controls on advertising (which can be intensely misleading)</li> <li>-availability of ATMs and credit, and</li> <li>-self-exclusion arrangements.</li> </ul> <p>In such areas as above, self-regulatory approaches are unlikely to be as effective as explicit regulatory requirements. In most cases, these can be designed to enhance, rather than restrict, consumer choice by allowing better information and control.</p>	<p>In Nova Scotia's two casinos, ATMs and credit card advances by machines are available. Regulations allow only for out-of-country, pre-approved credit. The casinos also have a self-exclusion policy that is regulated by the Alcohol and Gaming Authority. Regulations prohibit advanced credit to video lottery players and dictate the location of ATMs in video lottery terminal areas. Information on the risks of problem gambling and the problem gambling hotline telephone number are available in casinos and in areas that house video lottery machines. The Alcohol and Gaming Authority has recommended in the past that video lottery terminal operators also be required to develop a self-exclusion plan.</p>	<p>The Alcohol and Gaming Authority agrees that more information about price and the nature of gambling products, most specifically the odds of winning at the activities, should be made more available for all gambling areas, including bingo and the traditional lotteries. Self-exclusion standards and self-exclusion policies, meanwhile, should be the focus of regulations.</p>
<p>3.6 Counselling services for problem gamblers serve an essential role but there is a lack of monitoring and evaluation of different approaches and funding arrangements in some jurisdictions are too short term.</p>	<p>The Alcohol and Gaming Authority has recently compiled, for the first time, a list of treatment providers. The casino operator forwards \$1 million each year to the Nova Scotia Department of Health for treatment, prevention programs and research. In addition, video terminal operators and the Gaming Corp combine to provide funding for ongoing support of problem gambling related research, prevention, education and treatment through the Nova Scotia Gaming Foundation.</p>	<p>Further work is needed to evaluate the efficacy, availability and outcomes of various treatment programs, possibly with an eye towards developing some measure of accreditation. Funding of these programs is secure, but must be made more clearly accountable.</p>
<p>3.7 Services, awareness promotion and research activities related to problem gambling are likely to be most effectively funded from earmarked taxes on all segments of the gambling industry, with the allocation of funds independently administered. (In addition, the Commission details its concerns that gambling revenues not targeted at problem gambling should all go into general revenue funds because gambling allows elected officials to escape budget scrutiny and does not provide a means for accountability and transparency of use and because fluctuations in funding can harm health services.)</p>	<p>As mentioned earlier, the Gaming Foundation and the Department of Health each receive funding for various aspects of awareness, prevention, treatment and research activities relating to problem gambling and addiction. The Alcohol and Gaming Authority is mandated to conduct ongoing studies of gambling in the province. A portion of gaming revenues from the Sydney casino is reserved for charitable works and the Atlantic Lottery Corporation provides funding to several specific causes.</p>	<p>Funding for problem gambling research, education, treatment and prevention programs is currently pulled from several gaming-related sources. The allocation of those funds has been on a piecemeal basis and needs to be made more centralized in order to avoid duplication and improve accountability. The funds need to be independently administered by an agency not involved in either conducting gambling operations or providing treatment for problem gamblers.</p>



<p>5.8 Internet gambling offers the potential for significant consumer benefits, as well as new risks for problem gambling. Managed liberalisation – with regulation of licensed sites for privacy, consumer protection and taxation – could meet most concerns, but its effectiveness would require the assistance of the Commonwealth.</p>	<p>The Criminal Code of Canada effectively establishes Provincial jurisdiction over gambling in Canada. Internet gambling falls under the scope of the Criminal Code of Canada.</p>	<p>Amendments to the Criminal Code might be necessary to better deal with all forms of internet gaming. Effective regulation might better address concerns over the new form than would prohibition which would be difficult to enforce.</p>
<p>5.9 On the basis of available information, there is not a strong or unambiguous case for significantly reducing gambling taxes. Any changes would need to be incremental and carefully monitored.</p>	<p>In Nova Scotia, all legal gambling is controlled by the Province. No taxation, at such, exists.</p>	<p>No change is anticipated.</p>
<p>5.10 The mutualism principle, combined with lack of constraints on gaming machine numbers, appears to be distorting the investment and pricing decisions of clubs, with impacts on competitors, but options for dealing with it are not straightforward.</p>	<p>In Nova Scotia, all legal gambling is controlled by the Province. No taxation, at such, exists, therefore the mutualism principle, which exempts certain club income from taxation, does not apply in this jurisdiction.</p>	<p>No change is anticipated.</p>
<p>5.11 Policy decisions on key gambling issues have, in many cases, relied across to objective information and independent advice – including about the likely social and economic impacts – and community consultation has been deficient.</p>	<p>In Nova Scotia, all legal forms of gambling are controlled by the Province. The Alcohol and Gaming Authority is responsible under the Gaming Control Act to conduct research and study into the social and economic impacts of gambling in the Province and report its recommendations. Other agencies also conduct research of varying degrees into specific aspects of gaming.</p>	<p>The Alcohol and Gaming Authority continues to also see a need for a central research facility, a Gambling Institute, that would act as the central clearinghouse of research projects in order to avoid duplication of efforts in the Province.</p>
<p>5.12 An ideal regulatory model should separate clearly the policy-making, control and enforcement functions.</p>	<p>Under terms of the Nova Scotia Gaming Control Act, such separation is present, with the Gaming Corp. responsible for the operation of all legal gaming and the Alcohol and Gaming Authority responsible for the enforcement of current laws, regulation and for specified research aimed at assessing gaming's impact on the Province.</p>	<p>No change is anticipated.</p>
<p>5.13 The key regulatory control body in each state should have statutory independence and a central role in providing information and policy advice, as well as in administering gambling legislation. It should cover all gambling forms and its principal operating criteria should be consumer protection and the public interest.</p>	<p>The Nova Scotia Gaming Control Act does specifically that. It orders the Alcohol and Gaming Authority to license and regulate gaming activity and to carry out a research study of the operation and administration of gaming activities, of the public interest and public interest as well as the social, health, justice, economic and environmental impacts of gaming. The Act gives the Alcohol and Gaming Authority autonomy to conduct its work, and orders that it is administrator its duties "in the public interest and in accordance with the principles of honesty and integrity."</p>	<p>No change is anticipated.</p>

# From Chapter 6 Key Messages:

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>6.1 It is very important to see problem gambling as a continuum – with some people having moderate problems and others very severe problems. Public policy is appropriately directed at both those who need help to resolve their problems, those whose lives are adversely affected without needing clinical or counselling intervention, and those who are at risk of developing problems.</p>	<p>All present treatment programs are not measured in any way for their clientele, their efficacy or outcome, so it is difficult to know if treatment programs are adequately meeting all these needs. That being said, the Alcohol and Gaming Authority, the Department of Health, Gaming Corp. and its agents are all working on responsible gaming initiatives, education and prevention programs that are aimed at these three distinct markets.</p>	<p>Novo Scotia could improve co-ordination of its efforts in this regard.</p>

# From Chapter 7 Key Messages:

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>7.1 Around half of those with at least moderate gambling problems say they have suffered depression as a result of gambling. And about nine per cent of problem gamblers (and 50 per cent of those in counselling) report that they have seriously thought about suicide because of their gambling. It is estimated that there are between 50 and 400 suicides linked to gambling each year. Around one in five of severe problem gamblers are reported to be suffering from alcoholism or other dependencies. (In its main report, the Commission also points out that 40 per cent of problem gamblers' partners had developed significant stress-related emotional distress or other symptoms.)</p>	<p>The Department of Health currently includes gambling in its addictions treatment services portfolio.</p>	<p>While those who seek counselling for gambling may be suitably screened for possible co-addiction, there is still a need for greater education in the general community with regards to the risks and signs of problem gambling and for improved intake procedures in the health and justice communities. Careful screening needs to be matched by treatment that is appropriate to need, as mentioned above.</p>

# From Chapter 8 Key Messages:

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>8.1 While causation is hard to prove beyond all doubt, there is sufficient evidence from many different sources to confirm a significant connection between greater accessibility – particularly to gaming machines – and the greater prevalence of problem gambling. Help seeking by problem gamblers is also strongly associated with accessibility, although the direction of causality may vary.</p>	<p>In Nova Scotia, there are two Government-operated casinos and a moratorium has been placed on the number of video lottery terminals. In addition, research and preliminary work is being undertaken on other issues relating to accessibility including the ease of use, conditions on entering gambling venues and the initial outlay required to gamble. Gaming agencies, including the Alcohol and Gaming Authority, monitor the number of help-seekers in the Province.</p>	<p>Continued research and improved regulations are required to better control accessibility to and use of gaming in the Province. Among the measures that might be considered is a legislated age of entry for all forms of gaming, including video lottery machines that discourage problem play; greater emphasis on prevention of problem play through responsible gaming initiatives and public education.</p>

**From Chapter 13 Key Messages:**

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>13.1 Governments derive substantial revenue through licensing and taxation of gambling:</p> <ul style="list-style-type: none"> <li>- There is an interdependence between exclusivity arrangements and tax policy. Exclusivity disadvantages consumers by raising taxes and restricting choice. There are concerns about the high regulatory costs and profit checking of licensees and key staff. Exclusive licensing has not been effective in reducing problem gambling.</li> </ul>	<p>The Criminal Code of Canada gives the Provinces authority to conduct and manage all legal gaming in their jurisdictions.</p>	<p>No change is anticipated.</p>

**From Chapter 14 Key Messages:**

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>14.1 The only justifiable policy rationale for regulating access to gambling is to limit social harms or to meet community norms. Existing quantity constraints – such as caps on poker machines – are blunt instruments for reducing negative social impacts or dealing with community concerns. Consideration of gambling venues may be located might be a better way of addressing concerns than restrictions on the number of poker machines. A seven letter approach may be used to reduce the potential social harms of gambling at their source, by re-designing aspects of gambling environments, the environment of the venue, greater reliability of help services and stronger prevention programs.</p>	<p>Novus Scotia implemented a moratorium on the number of its video lottery terminals in 1999/00. It has restricted the placement of VLTs to liquor-licensed establishments since the early 1980s in response to strong community concern about youth play. The Gaming Corp., in a request for proposals issued in 1998/99, has asked manufacturers of video lottery machines to find ways of helping ease problem play while continuing the employment for others.</p>	<p>The Alcohol and Gaming Authority sees more possibility for hardware and software changes that might mitigate problem gambling. It also continues to see a need for prevention programs that better explain the odds of winning, the norms of regular play and signs of problem play not only for VLTs but for all forms of gaming.</p>

**From Chapter 15 Key Messages:**

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>15.1 Reducing the risks of crime and problem gambling, and increasing the scope for informed consent by consumers, provide a strong basis for oversight of gambling by governments.</p>	<p>In Nova Scotia, police are involved in surveillance of casinos and in background checks. Alcohol and Gaming Authority compliance officers oversee other forms of gambling. The regulator can sanction licensees for breaching of the rules.</p>	<p>Strong oversight already exists. Still, stronger regulations regarding VLTs are needed. Regulations are also required to expand the required reporting and public education regarding such things as the probability of winning and play techniques.</p>
<p>15.2 Bases on specific forms of gambling to protect consumers are not warranted.</p>	<p>The Criminal Code of Canada and the Gaming Control Act restrict the nature of gambling activities in the Province.</p>	<p>No change is anticipated.</p>

15.3 There should be better disclosure of the price of playing poker machines, the likelihood of receiving high paying winning combinations and the expected duration of gambling sessions.	No such disclosure is currently required.	The Alcohol and Gaming Authority agrees that such information should be provided, and perhaps even required, but would argue that the measures are needed for all sorts of gaming, not just video lottery terminals.
15.4 Relevant information should be provided to consumers about the nature of games, such as the fact that machine wins and losses are independent of past results.	No such information is routinely circulated.	The Alcohol and Gaming Authority believes that information on odds and probabilities should be made available, including in carefully prepared prevention and public education programs.
15.5 Consumers should be provided with records of their spending, where technology allows this.	Such information is not believed to be presently available to players in any venue. Casinos currently acquire some marketing information regarding play from club membership data.	Any plan that involves release of player tracking data should be carefully vetted for concerns regarding personal privacy issues. That said, the Alcohol and Gaming Authority continues to investigate technological advances that could provide VLT users with a running account of the time and money spent in play while the machines are in use.
15.6 Problem gambling should be seen as a public health issue – governments should increase community awareness of the risks of gambling, including the wider development of material for school children.	The Nova Scotia Department of Health is directly involved in efforts relating to problem gambling, including operation of the problem gambling hotline. It receives \$1 million each year from operations of the Province's two casinos for education, treatment and prevention programs. It was also integral in the development of a gambling-related curriculum for use in the Province's schools.	Continuing efforts at prevention through increased public awareness of the norms and problems of gambling. The efficacy and outcome of treatment programs need to be monitored with an eye toward developing standards for measurement.
15.7 There are grounds for a special legislatively based code of conduct that ensures appropriate standards of advertising, promotion and marketing of gambling.	The North American Association of State and Provincial Lotteries has developed a list of advertising standards for member lotteries.	Provincial standards for the control of advertising, promotion and marketing of gambling should be developed and adopted in Nova Scotia.
15.8 There may be grounds for reducing the frequency of high frequency, low payoff lotteries, such as keno.	This recommendation does not appear to be applicable in the jurisdiction.	No change is anticipated.
15.9 There are grounds for restrictions on multiple withdrawals and on withdrawal amounts from ATMs in gambling venues, and potentially an outright ban.	In Nova Scotia's two casinos, ATMs and credit card advances by machines are available. Regulations prohibit advancing credit to video lottery players and the location of cash machines in VLT premises is regulated.	The Alcohol and Gaming Authority believes this is an area that continues to need to be monitored.

15.10 There may be scope for the development of a regulated requirement to withdraw gambling services from a person who appears to be experiencing problems, as in the case of alcohol. There is also a case for mandatory rather than voluntary codes of conduct for responsible provision of gambling by venues. There may be grounds for incorporating some of these provisions into a statutory 'duty of care' by gambling venues to their patrons.	In Nova Scotia, casino regulations expressly prohibit service to anyone who exhibits signs of problem gambling. In addition, the casino operators have developed a mission statement regarding the matter and an operating team that administers it. The operator continues to train its staff on that policy and to provide refreshers throughout the casinos that offer problem gamblers to assistance. It also participates in an annual Responsible Gaming Education Week public awareness blitz organized by the American Gaming Association each August. The Gaming Corp. is developing a responsible gaming policy with regard to video lottery areas.	Other gambling providers should be encouraged to adopt similar recommendations and in some circumstances should be mandated to do so.
15.11 An easy-to-use self-exclusion procedure should apply in all gambling venues throughout Australia and be widely publicized in all venues.	Self-exclusion policies for casinos are regulated. The Alcohol and Gaming Authority has already suggested that self-exclusion policies be implemented in video lottery areas.	Regulations could be developed to extend self-exclusion programs to all forms of gambling.
15.12 There are a wide range of possible changes to the design of poker machines which should be investigated to reduce their hazards for problem gambling, without overly affecting recreational gamblers.	In its most recent request for proposals for new video lottery terminals, the Gaming Corp. featured a responsible gaming initiative that included a request that manufacturers include specifications for just such developments.	Continued monitoring with an eye to developing and implementing technologies as soon as they can be proven.
15.13 Probity regulations should employ appropriate risk-management, codes should be borne by the gambling industry, and a common framework applied across gambling types and venues.	In Nova Scotia, probity background checks are conducted by the Alcohol and Gaming Authority using the independent services of the RCMP. Costs of such services are assessed as fees to applicants for registration.	No change is anticipated.

#### From Chapter 16 Key Messages:

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
16.1 Areas requiring attention in terms of effective service delivery by problem gambling counselling agencies relate to: <ul style="list-style-type: none"> <li>approaches used to assess the severity of gambling problems of clients;</li> <li>assessment of client outcomes after counselling and/or treatment;</li> <li>the effectiveness of counselling techniques used; and</li> <li>whether the needs of particular client groups are being met.</li> </ul>	As mentioned earlier, the Alcohol and Gaming Authority has recently compiled a list of treatment providers.	Further work is needed in defining problem gambling before accurate tests can properly assess whether the severity of gambling problems are being properly addressed. That said, steps can and should be taken to better evaluate the efficacy, availability and outcome of various treatment programs, possibly with an eye towards developing some measure of credentialed but also to allow further development of treatment and prevention programs where needs are not being sufficiently met.

**From Chapter 17 Key Messages:**

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>17.1 The Commission considers that, regardless of what regulatory approach is taken toward Internet gambling, there are strong grounds for governments to pursue palliative measures, such as:</p> <ul style="list-style-type: none"> <li>-warning people of the hazards of offshore online gambling;</li> <li>-providing information on the Internet about gambling help services and gambling sites which meet consumer protection criteria;</li> <li>-and making available or promoting software for providing consumers with greater control over online gambling.</li> </ul>	<p>Under terms of the Criminal Code of Canada, gambling on the Internet is not currently legal. The Nova Scotia Department of Health's problem gambling services division has developed a Web site with information on problem gambling in general.</p>	<p>Continuous monitoring of the area of Internet gambling is warranted.</p>

**From Chapter 21 Key Messages:**

Australian Commission Recommendation	N.S. Current Status	N.S. Outlook
<p>21.1 In addition to an independent gambling control authority, a "big picture" policy setting government and a separate enforcement body, a good regulatory model would feature an independent board with responsibility for funding of counselling and harm minimization programs, and research and information gathering and dissemination.</p>	<p>The Alcohol and Gaming Authority has the responsibility of licensing and regulating gaming activity and of carrying on continuous study of the operation and administration of gaming activities, of pertinent laws and public interest as well as the social, health, justice, economic and environmental impacts of gaming. The Gaming Control Act gives the Alcohol and Gaming Authority autonomy to conduct its work, and orders that it is to administer its duties "in the public interest and in accordance with the principles of honesty and integrity." The Alcohol and Gaming Authority has included in its annual report recommendations each year the creation of an independent Gaming Institute, responsible for co-ordinating the research projects undertaken by various government agencies.</p>	<p>The Alcohol and Gaming Authority will continue to press for any necessary regulatory changes.</p>